

# Textile bulletin

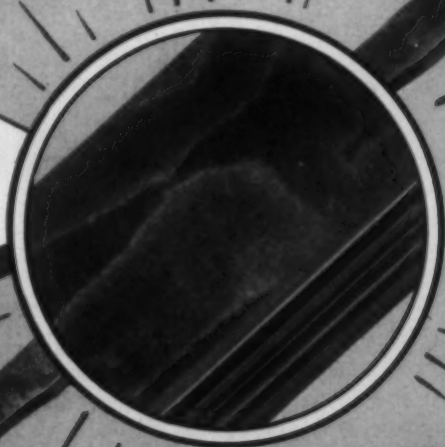
JANUARY • 15 • 1946

The cotton spinning process and its adaptability to other fibers is discussed by E. C. Gwaltney, research director for Saco-Lowell Shops, on Pages 17 and 18 of this issue.

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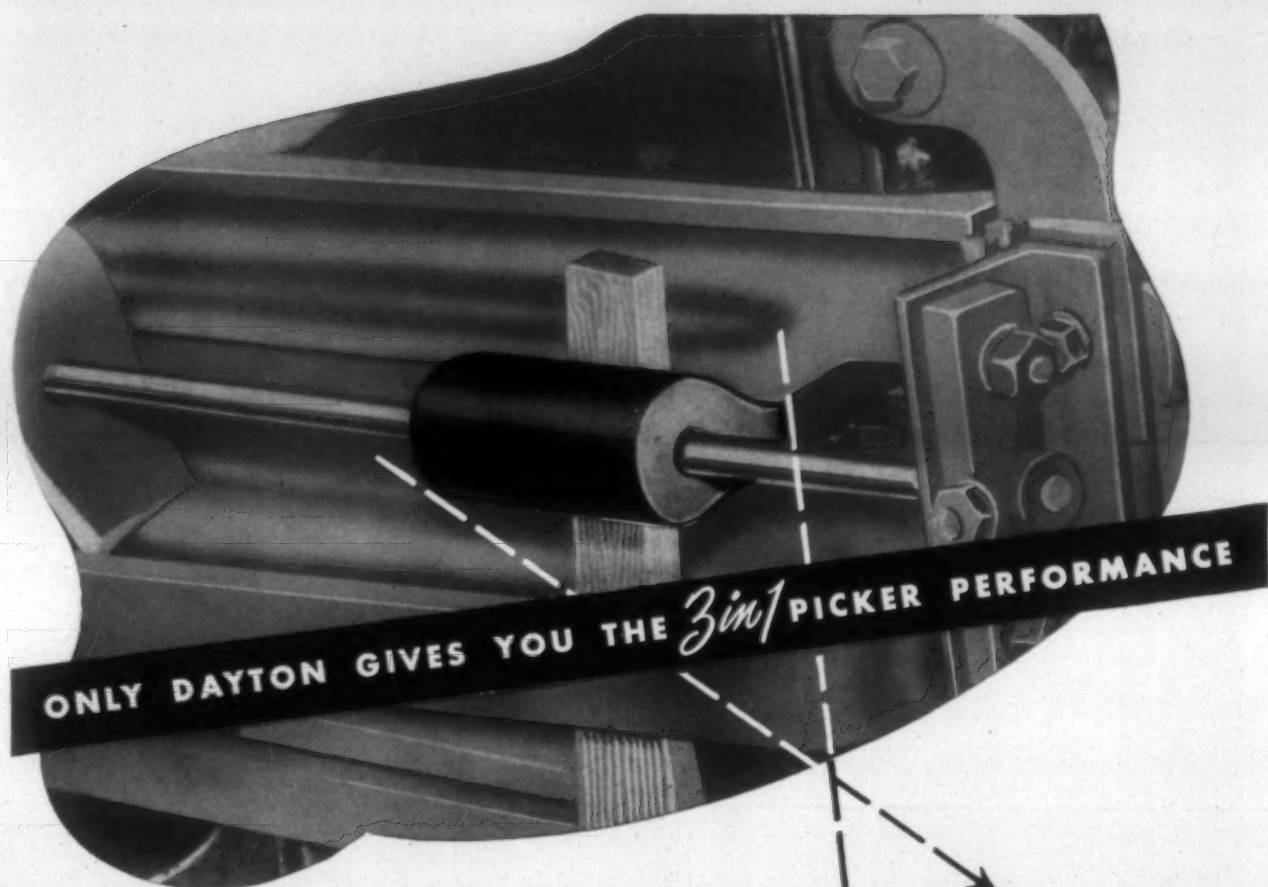
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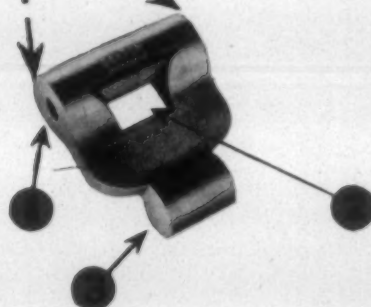
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"Won't admit it," the Sleuth went on, thinking aloud, "but without good products I'd be a failure! Now take high-titer Flint—it's made to order for these two cases. A good soaping with Armour's Flint Chips removes excess dyestuffs, clears the whites, brightens and fixes colors ... your cottons always come out bright and clean! And Flint gives you a better, cleaner kier boil because it penetrates quickly, rinses fast and stays active under steam!" With that the Sleuth was off to solve another textile problem.

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But while we have been able to buy or make improved machine equipment, increased MAN-POWER is hard to procure. Lack of it is the barrier that has been holding us back. It is a common handicap to industry today.

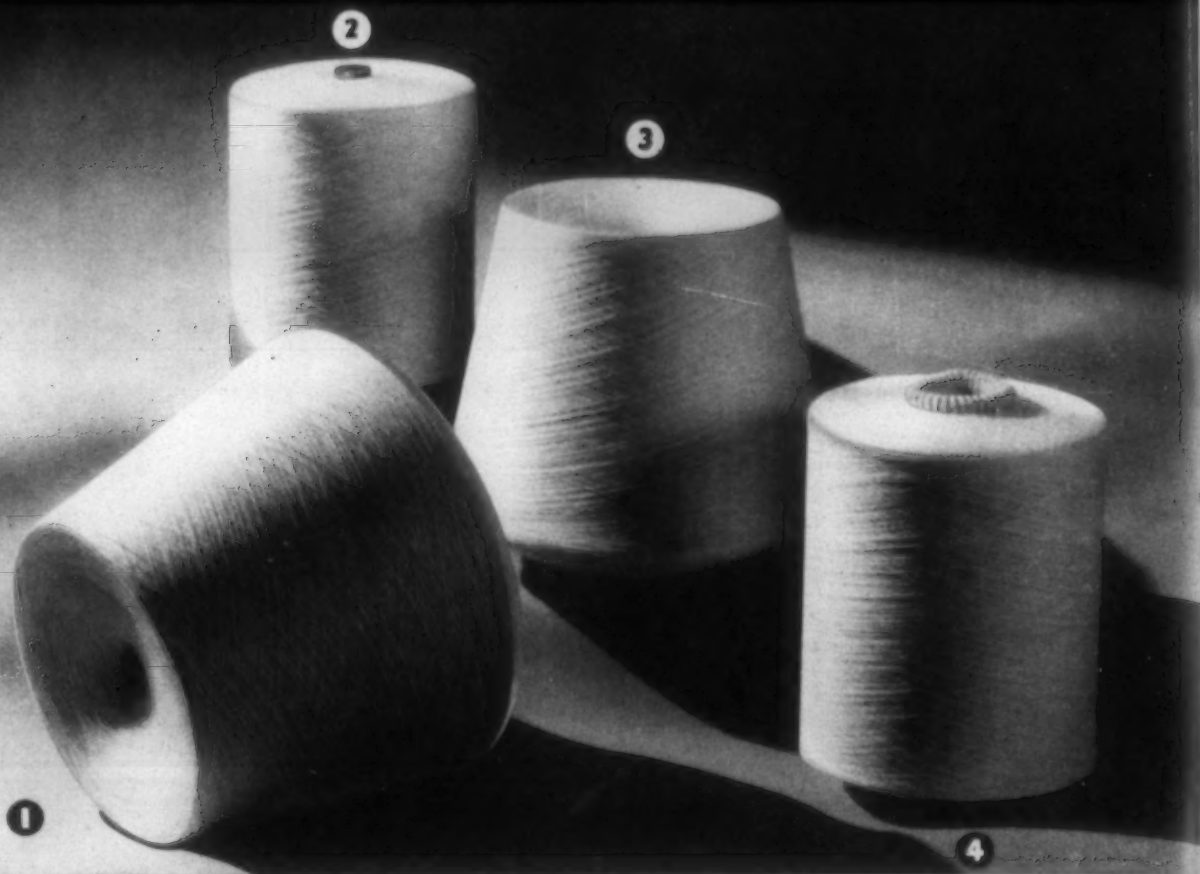
We are hoping that conditions in 1946 will see a gradual reduction of this barrier to increased production.

Draper Corporation

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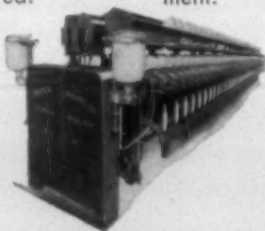
even if damp in the center of the package. No jumping out of guides.

4. It will wind emulsion treated yarn. In fact it is frequently equipped with an emulsion attachment.

5. Changeovers from cones to tubes, or vice-versa, are comparatively inexpensive.

6. One side can wind cones and the other tubes, if desired.

Send for Bulletin A-91



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"Jerry" served us and our trade faithfully for seven years, until pneumonia laid him low last summer while on a field trip. He died suddenly, and his loss was keenly felt by us and by mill friends alike.

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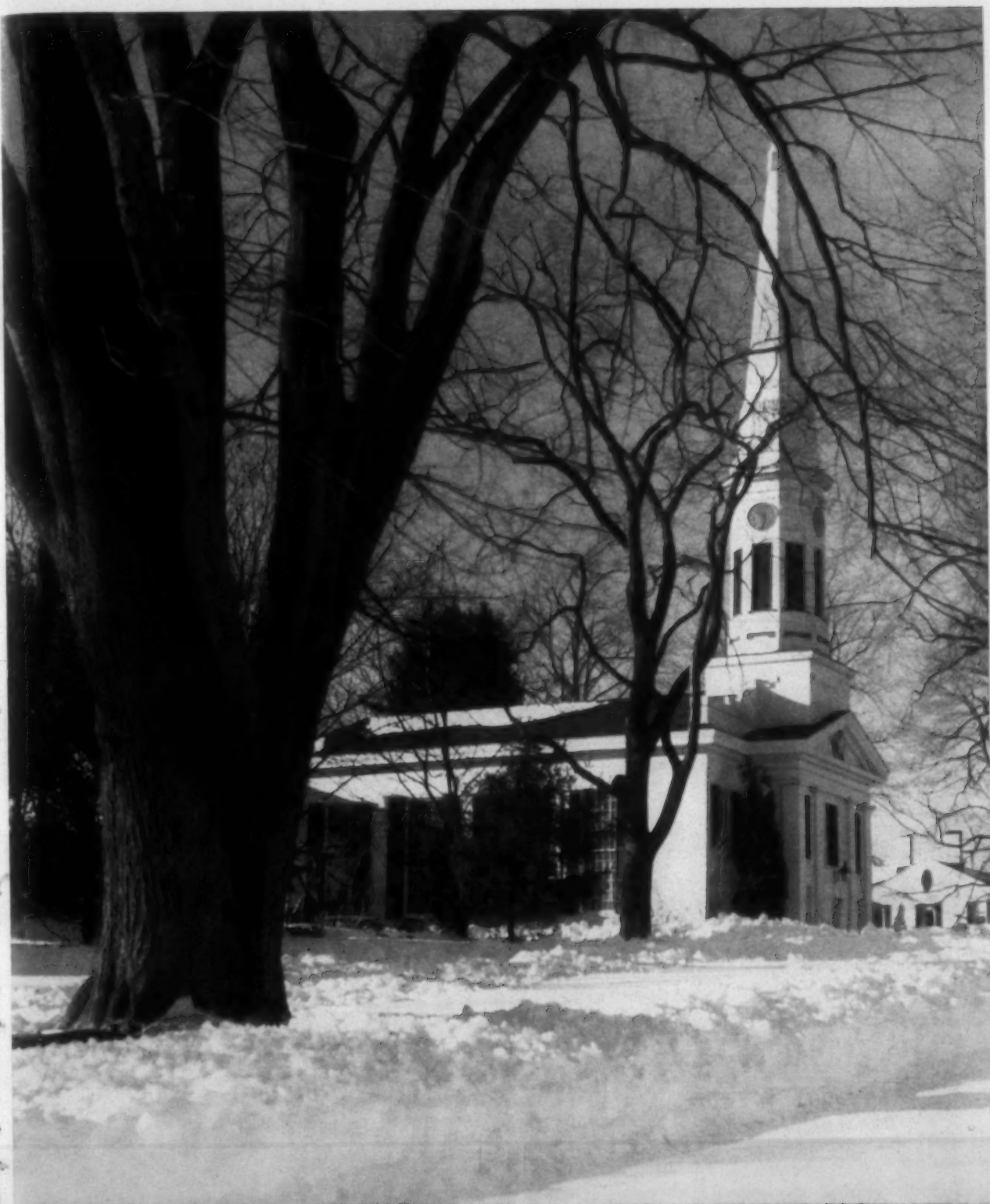
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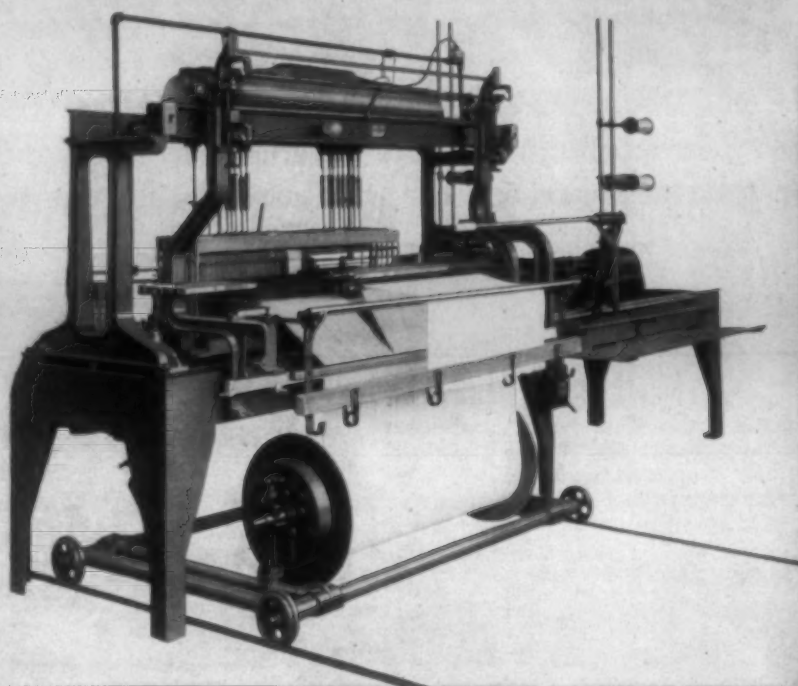
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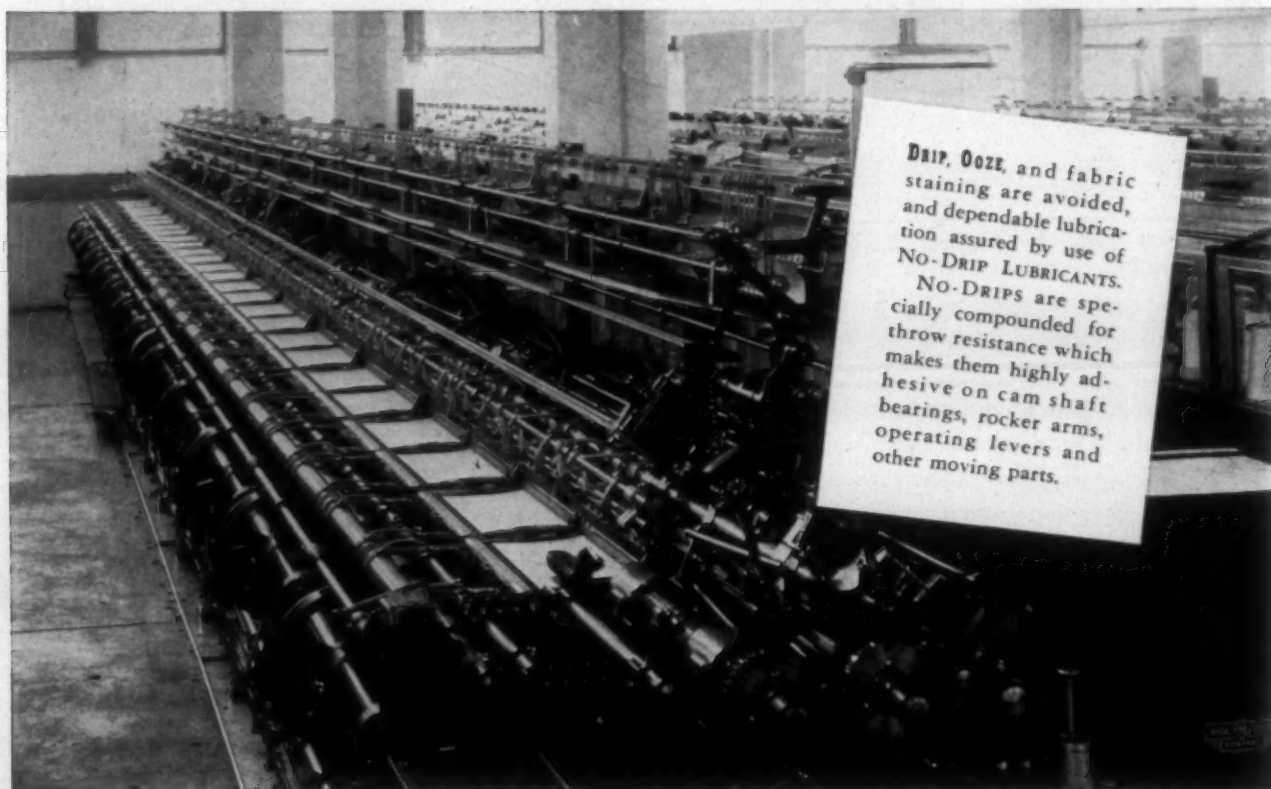
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## The Cotton Spinning Process and Its Adaptability to Other Fibers

By E. C. GWALTNEY, Director of Research, Saco-Lowell Shops, Biddeford, Maine  
Address before American Association of Textile Technologists

THERE has been a great interest shown in recent years in the manufacture of yarns from other fibers on the cotton process. First there was a demand that we adapt this process to the spinning of staple rayon, using fibers much longer than cotton. Then, after the machines were adapted to this purpose, the shorter wools were experimented with in some cases with surprising results.

With such useful and superior woolen fabrics produced on the French and Bradford systems, what can the cotton system offer? The answer is: in quality, little or nothing; but in cost, a great deal. A tremendous saving is possible when and if the cotton system is adequately developed to make a yarn of acceptable quality. A short review of the cotton system, its virtues and shortcomings should give us perhaps a broader vision of this trend.

The cotton system is the oldest, the most widely practiced and the most competitive of any factory method of forming strands from fibers. Its development reached its present stage without the use of today's statistical methods or the analytical approach in use by our present-day research workers. It came of age by the cut and try method; yet such was the industry and genius of our predecessors that today the cotton system has no competitor in all industry from a cost standpoint. We take cotton from the bale, clean it, lay the fibers parallel, spin it to size with a plus or minus average tolerance of two per cent and wind it on an attractive package at less cost per thousand yards than anything in all commerce. You can't squirt anything through a hole as cheaply as we put cotton through all our processes. The reason is that through the years we have so developed, simplified and foolproofed our cotton process that a spinner can attend from 1,000 to 3,000 spindles or producing units; whereas, in the manufacture of wire or similar products, one operative can attend only a few holes.

In all industry where can you find an operative attending so many producing units? This is the basic reason for the low cost of spinning on the cotton system. The infinite attention to small details to reach this goal is astounding. The industry today is not satisfied with even the best; for something better will allow the spinners to attend more spindles. Engineers coming into our industry have criticized

our machines as heavier than needed to perform the work required of them. The ring and traveler has been called a mechanical abortion, yet the little inexpensive traveler travels more miles per day than all other structures made by man. There are over 100 million ring spinning and twister travelers running today at nearly one mile per minute. This adds up to more than 100 million miles per minute that this little piece of wire we call a traveler, costing so little that our traveler bill is one of our least items of cost, travels with little or no attention. When all is said about the advantages of our cotton spinning process, it can only be said that we produce a commercially acceptable strand at an amazingly low cost.

A variation in cross-sectional area of 1,000 per cent exists in the best commercial yarns. As long as we use the drafting rolls of Wyatt and Paul, we will have this variation to contend with. If it were not for the fact that yarn with this variation is commercially acceptable because of its low cost, more work and genius would have been spent on better ways of reducing the strand from the card or comber sliver to the desired size.

Another helpful factor is that yarns can be very irregular, but when plied and woven the finished article will give a strength almost as great as greatly superior single yarns if made from the same stock. When in the tire cord industry, I was always surprised and disappointed in finding very little improvement in the final cord after much work and effort had been spent in improving the strength of the single yarn. This also explains why most print cloth mills have gone to single roving for their filling, using higher than normal draft. The saving in cost was considerable; the loss in strength or appearance in the cloth was just barely noticeable.

We can blame our test methods for much of our lack of progress. One of our foremost scientists has made the statement that all the sciences, with the exception of mathematics which is the only science based on logic, are based on the "reproducible experiment." Send any textile sample to several testing laboratories and you get as many results, most of them varying widely. Is this the reproducible experiment? With such a condition existing we need look no

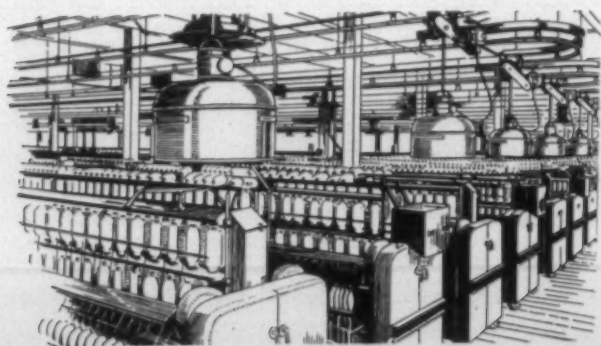


further for our lack of progress in cotton spinning research. Every one thinks his tests are correct, yet can get few, if any, to agree with his results. The question was asked a man who had just completed the development of a very superior long-draft system as to how valuable his testing was. He replied that if a test showed what he thought it should show, he accepted it, and if not, he threw it out.

Years ago a mill had a carload of tire fabric rejected. After sewing in by hand new tabby ends and wrapping it in new burlap, the fabric was shipped back and the user wrote a letter complimenting the mill on the improvement of this shipment over current deliveries. The man doing the testing in both cases was the same, and was a competent and careful technologist. Test methods that do not give the true picture, not once but repeatedly and in different laboratories, should be re-examined.

It is my opinion that our philosophy of testing yarns is all wrong. The work now being done on impact testing is opening a new field of thought and will dispel some of the ignorance that now holds us back. Every strand of textile material serves to hold something, either in service or during some subsequent process. It must withstand a definite minimum stress. This stress is greatly below the average strength. Many times we could lower our average but increase our minimum, and have better weaving, lower costs, and fewer seconds.

In a large weaving mill we do not test enough yarn daily to wad a gun—only a minute fraction of one per cent, and this is a product with an infinite number of variables. The occasional weak spots that stop the looms are usually ignored in our test reports. It is the frequency and extent of freaks that is all important but largely overlooked. Suppose, for instance, we had 20 or 30 small high-speed test spindles that would wind the yarn on a package such as is used on the warpers, so made that a definite strain was put on the yarn going through, set at some arbitrary figure well below the average breaking strength. They would be made so the yarn would break at any spot weaker than the value set and register the number of breaks as well as the yardage. One girl could tie up the breaks and run the 20 or 30 spindles and the yarn would all go into production channels.



Now, if we would test all bobbins from frames one, two and three today and so on through all the frames and if our breaks per 10,000 yarns showed on No. 1, five breaks; No. 2, seven; No. 3, four; No. 4, four; and No. 5, 28, we would have information of great value. We would go to frame No. 5 and perhaps find worn or eccentric gears, rolls in bad condition, or some other defect, and would gain information which we could apply instantly over the whole of the spinning. In like manner, we could check our other

processes. A weaver in this mill, after a few months of intelligent testing of this kind, would be a satisfied weaver, produce more and better cloth and earn more for his employer. We have worked with averages too long. It is time to run down the weak links.

It has been said that cotton should have the lowest coefficient of friction possible between fibers during drafting, and the highest possible after the thread is twisted. Recent experiments using Syton would indicate that the coefficient of friction can be raised if it can be equalized or brought to a common value on all the fibers. I fully believe that the next great advance in improving cotton textiles will be made by the chemist and not the engineer, though I am convinced beyond a shadow of a doubt that in the next decade the man-hours used in manufacturing cotton yarns will be cut in half by the engineers, though without any great improvement in quality. Any such improvements in cost reduction will also affect the spinning on the cotton system of other fibers.

### Synthetics On The Cotton System

Except for the presence of static electricity, which is more common in synthetics than in cotton, the spinning of synthetic fibers presents fewer problems. They do not have the great variability in length, diameter or surface friction that we have to contend with in cotton. The staple producers have largely eliminated static by the treatment or finish they give their product. Such fibers require no cleaning; and picking, which is needed only to prepare a lap to feed the card, should be the absolute minimum to produce an even sheet, as picking seems to be a necessary evil.

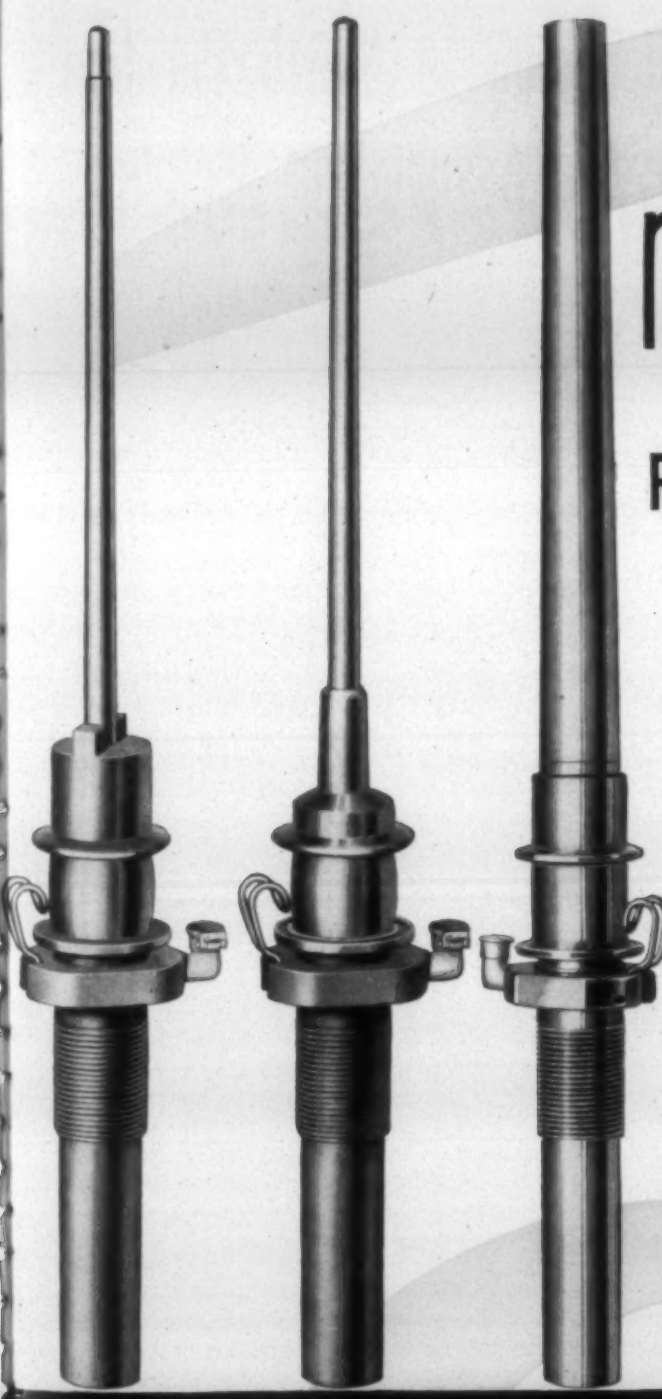
Everyone has his own blending system; but few, if any, are satisfied with their blending. A lot of work is being done to produce a foolproof and adequate system, and one should be available soon. Many blends are cross dyed and require a very high degree of perfection in the blending system to avoid filling bard.

Carding synthetics is relatively easy. The fibers are more rigid than cotton and can be carded faster, though the finer deniers must be carded more slowly in order to avoid damage and neps. The coarser deniers can be carded at a greater speed than even the shortest cotton. Both roller and flat cards are used successfully. The roller card takes out no waste and improves the blending. On the flat card, no matter what the blend, the flats seem to take out a larger amount of the higher priced stock, thus affecting the blend. This had to be considered, if flat strips are used over again.

The setting and grinding of the card follows conventional practice. The card screens should be set very carefully or preferably some of the new screens used to prevent unnecessary loss of good stock. Long nose feed plates are used on stocks  $1\frac{1}{8}$  inches or longer. The finer deniers and longer staples require a much slower licker-in speed. About 200 R.P.M. is a good speed for normal carding rates on the medium and fine deniers. It can be increased for the coarser fibers. The drawing frame follows conventional cotton practice except for wider spread rolls and changes in clearers. It is on drawing that static is most troublesome.

The roving process, with any of the new wide-spaced long draft systems, differs only from cotton by the amount of twist needed. The twist is much lower, decreasing as staple length increases. Spindle speeds are usually reduced on the 8x4 and smaller roving (*Continued on Page 56*)





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# Report of Technical Discussion at South Carolina Meeting of Southern Textile Association Members

THE fall meeting of the South Carolina Division of the Southern Textile Association was held Dec. 1 in the textile school building at Clemson College, S. C., under the direction of John M. Caughman, general chairman of the division. The early part of the meeting was devoted to short addresses of welcome by Dr. R. F. Poole, president of Clemson College, and Dean Hugh M. Brown of the Clemson school of textiles. Those present voted to retain Mr. Caughman as divisional chairman along with Newton G. Hardie, chairman of the weaving section, and J. B. Templeton, chairman of the spinning section.

Presented below is a stenographic account of the weaving discussion followed by that on spinning:

CHAIRMAN HARDIE: The first question is on slashing; and it has two parts: "(A) What experience have you had with the motor-driven moisture-controlled slashers? (B) What are the principal features and advantages? That is a question in which we are all really interested.

C. B. HAYES, JR., assistant superintendent, Pacific Mills, Lyman, S. C.: We have three slashers equipped with this automatic control, and we have had pretty good luck with it. In my opinion we get a harder beam; that is, we get better control of our tension and get more yarn on the beam with it and get better moisture control. It does away, of course, with having to use hand friction. It is all automatically controlled. It is just a better warp all the way around, in my opinion.

MR. A.: You say you get a harder beam. A lot of people think that when they get a hard beam they get too much stretch out of the yarn. What is your opinion?

MR. HAYES: We are averaging about two per cent. We use 90, 80 and 72-inch beams and get a little under two per cent out. We use 20s yarn. I should say we get five to six per cent more yarn on the beam.

CHAIRMAN CAUGHMAN: How long have you had it in operation?

MR. HAYES: I would say five or six months. For the first few weeks we noticed a slight decrease in production, but after we had them in operation a sufficient length of time we noticed it picked up.

CHAIRMAN CAUGHMAN: What is the cost per slasher? Is this a two-cylinder slasher?

MR. HAYES: No, we converted over to three-cylinder. We were running two-cylinder three-beam warp, and we converted to single beam plus an extra slasher, which gave us three cylinders, and we were able to go onto a one-beam job. I would say it is around \$7,000 per slasher.

QUESTION: Have you had any trouble with the electrical apparatus that operates these motors?

MR. HAYES: No. I do recommend an outboard bearing on the motor. We had a little trouble with our drives at first. We did not have the outboard motor originally. We have changed our drives and corrected the trouble. We

were running about 24 yards a minute and were able to go up to 32 yards a minute. We have been able to maintain that and keep the correct amount of moisture in the warp, the warp has around 7,000 ends. We were able to go to a larger beam head, which we wanted to do. By making this change we have not noticed any great improvement in weaving but have noticed a tremendous improvement in slashing; it is much more even in quality.

QUESTION: Can you maintain an even tension on a light slasher?

MR. HAYES: You have an automatic tension control which you can set—a manual control—so you can start off with any amount of tension you require, and as your warp builds up it maintains that. You can set it on the back of your size box—can set your tension—slacken it or tighten it up, and also on the delivery roll up front. As the beam builds up it takes care of the tension throughout. It is an electrical apparatus. One of the great advantages I see in it is that you can maintain constant tension throughout to make your loom beam as hard or as soft as you desire.

QUESTION: Do you have crossed ends?

MR. HAYES: With a large slasher like that I would not say that you have fewer crossed ends or that you have more. Of course, that depends on your operator. I would say it is the same situation throughout.

CHAIRMAN HARDIE: We are all interested in keeping the weave room clean, and I know many of us have had our bosses speak to us at one time or another about having a dirty weave room. Several men asked to have a discussion on that subject, so our next question relates to that. It is as follows: "What in your opinion is the best cleaning procedure for a weave room on cotton goods?" This matter of cleaning is handled on different schedules; some clean every day, some once a week, etc.

CRAWFORD RHYMER, superintendent, Gossett Mills, Williamston, S. C.: We have 680 looms. We blow off during the first shift. We do not feel that that is the best possible way, but we have a pretty clean weave room. We do that every other day.

CHAIRMAN HARDIE: How about your overhead cleaning?

MR. RHYMER: We brush down twice a week overhead.

GEORGE W. MCCALL, overseer of weaving, Pelzer (S. C.) Mills: We clean our looms every day. We use only 40 pounds of air, because that is all we have. We do try to watch the size of the hole. If it is too large or too small you do not get the proper amount of air to blow off the loom. Then we try to clean the loom thoroughly when the warp is out. I think that is the only time you can do it to get it really clean.

JOE C. COBB, assistant general superintendent, Pacific Mills, Columbia, S. C.: I think there are going to be more of us who are going to blow only those parts of the loom every day that need to be blown off in order to keep from

# 15th SOUTHERN TEXTILE EXPOSITION

APRIL 8 to 13, 1946

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Two hundred manufacturers of machinery and textile equipment have signed contracts, and will display standard and improved installations, machines, accessories, operating and office supplies, primary and fabricating materials, and parts. The exhibits will be interesting and helpful to manufacturers of yarn and cloth made of cotton, rayon, silk, and wool.

Due to conditions brought about by The War, textile plants desire to make replacements and improve equipment. The representatives of their financial and operating personnel, who attend the Exposition, will see many things which are new and useful.

Committees of citizens have been appointed so that all who attend the Exposition will be able to obtain quarters. Please send applications to "Rooms Committee, Care of Textile Hall Corporation."

## *Note*

This Exposition is for the textile industry. Due to the anticipated large attendance and crowded aisles, it is regretted that the public and children under sixteen years of age cannot be admitted.



making seconds. You are going to increase your seconds if you blow off some other parts of the loom every day. When you get into a line of goods in which you have to have quality you are going to blow out only your drop wires and so forth and let the rest of the cleaning go until the warp is out. I think some of us are going to have to get used to looking at dirty looms, because when you blow off the looms you are going to have seconds. We have to make up our minds to that. Some of us now want to blow off the loom every time the air hose comes by, but I think we are going to get used to looking at much dirtier looms and have air just for the drop wires, etc.

CHAIRMAN HARDIE: I see Mr. Derryberry of the Textile Shop at Spartanburg. He knows a good bit about this new slasher control we were talking about.

### Friction Is Eliminated

J. E. DERRYBERRY, Textile Shop, Spartanburg, S. C.: As far as actual operation of the slasher is concerned, I have not had a great deal of experience with it, but I have had experience in setting up the job. We have worked as hard as we could to get a drive that will control the tension on the yarn from beginning to end, taking out the friction, the side shaft and things of that kind. The motors are all special motors, variable-voltage motors rather than variable-ampereage motors; and that is unusual. There is only one AC motor in the lot, and that is a fan motor, which drives the fan. On the slasher proper you have to have a motor generator set, which is approximately 7.5 horsepower. This motor generator is driven with an AC motor and generates current for the various motors. If you do not have cylinders to be driven you go on back to the size box and drive the size box. In some cases, of course, you have a very light yarn and need to drive the cylinder; if the yarn is not strong enough to drive it you have to have it. It makes the job a little more expensive, of course.

The great advantage, of course, is that it does away with the friction. You have a mechanism that controls the yarn as the warp builds up and does away with friction completely. Of course, that is a marvelous help. We have put four motors on the set, with one big beam motor. Through synchronization of these motors we are able to control it. By a rheostat on every one of these motors except the lead motor you can control the tension at any part of the slashers. We have a motor on the size box that has run for some time with remarkable control on the stretch; it kept it down to 0.5 per cent. That is much less than I was ever able to get with friction. You also have moisture control. There is a moisture graph which is operated by the wetness or dryness of the yarn. It is the most scientific possible means, I think, of controlling both the stretch and the moisture content. You get the maximum efficiency out of your slasher at all times. Of course, the speed of the slasher is going to depend on the drying surface and the temperature of the cylinders. But by pre-setting this moisture control you can control the moisture and can speed up or slow down to such an extent that you will regain the moisture.

QUESTION: What is the cost of that installation, say for a two-cylinder slasher?

MR. DERRYBERRY: The cost on your multi-motor drive will run about \$3,700 for a two-cylinder slasher, driving the beam, the delivery roll, and one size box.

MR. B.: In your size box, do you drive both copper rolls in your size box or drive only the front one?

MR. DERRYBERRY: Both rolls are driven by chain linkage. The chain passes from the motor, which has a sprocket directly on the shaft, to the front delivery roll and the second delivery roll.

MR. B.: Suppose you had a slight amount of stretch from one copper roll to another. Do you control that with this?

MR. DERRYBERRY: We don't control that with the slasher, because it is due to a difference in the size of the rolls. We control that by changing the roll.

MR. B.: Suppose you run into the fact that you have two copper rolls the same size?

MR. DERRYBERRY: The rolls would have to be matched. And I think they would also have to be matched with your present size of drive shaft in the beveled gears. You can get any amount of moisture that you need.

CHAIRMAN HARDIE: The next question is: "Have you had any experience with loom spreaders?" I ask Mr. Roberts of Spartan Mills to tell us if he has had any experience with this.

D. H. ROBERTS, overseer of weaving, Spartan Mills, Spartanburg, S. C.: I have had a little experience with the loom spreader. In the experience I have had we went from 160 to 184, and I found that the production was not sufficient to justify the putting on of the spreader.

R. L. CALVERT, superintendent, Chiquola Mfg. Co., Honea Path, S. C.: We have some spreaders on our looms and like them very much.

CHAIRMAN HARDIE: How much did you step up your speed?

MR. CALVERT: We averaged around 160 on the old style and now average 177; E Model looms, some put in in 1902. We had some E Model looms put in, I believe, in 1937, and we average 184 on those.

CHAIRMAN HARDIE: Are you running about the same percentage of efficiency with the higher speed as with the lower speed?

MR. CALVERT: Yes, I think so. The only difference I noted is that we need more check straps.

QUESTION: How about shuttle consumption? Is it any higher?

MR. CALVERT: Yes, I think we use more shuttles.

CHAIRMAN HARDIE: Is your supply cost any higher?

MR. CALVERT: I don't think so.

QUESTION: What about the production?

CHAIRMAN HARDIE: He said he ran about the same percentage of production at the higher speed which he ran at the lower speed, which of course is more picks per hour on the loom.

The remainder of the meeting, on carding and spinning, will be conducted by J. B. Templeton.

### Carding and Spinning

J. B. TEMPLETON, superintendent, Poinsett Plant, Brandon Corp., Greenville, S. C.: The first question is: "Does the installation of the slow-motion drive on pickers with blending reserve box improve the lap? How?"

W. W. AULTMAN, assistant superintendent, American Thread Co., Clover, S. C.: We have two slow-motion drives on our Saco-Lowell. We have from time to time made tests, and I have some figures from one of our recent tests. We made a waste test and made a test on the lap meter. On the lap meter test we showed a four per cent increase of yards within the limit, over the old drive; and on the waste test we found approximately ten (Continued on Page 54)

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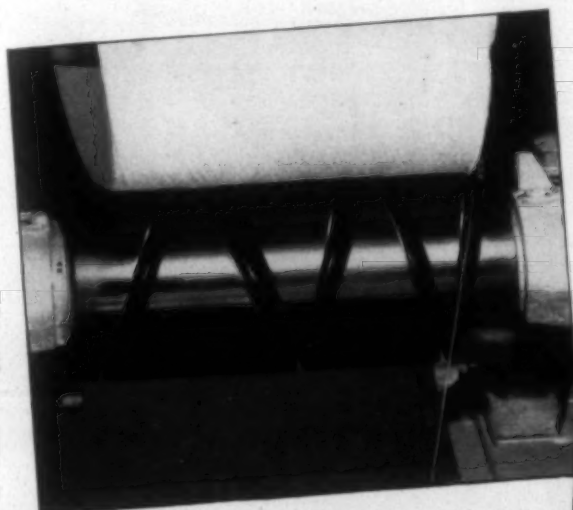
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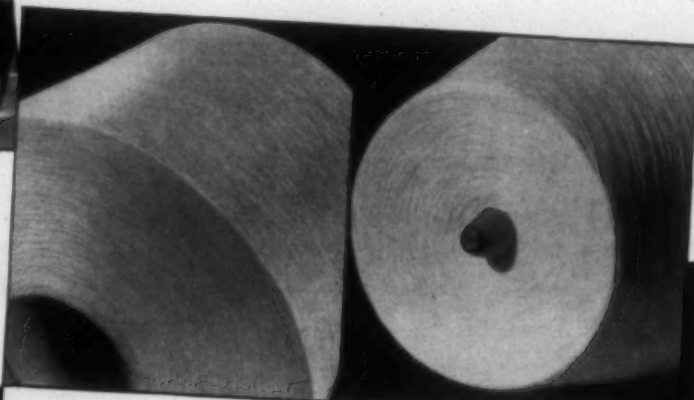
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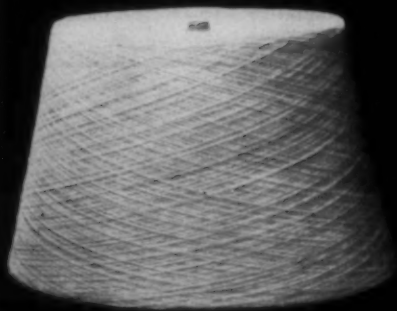
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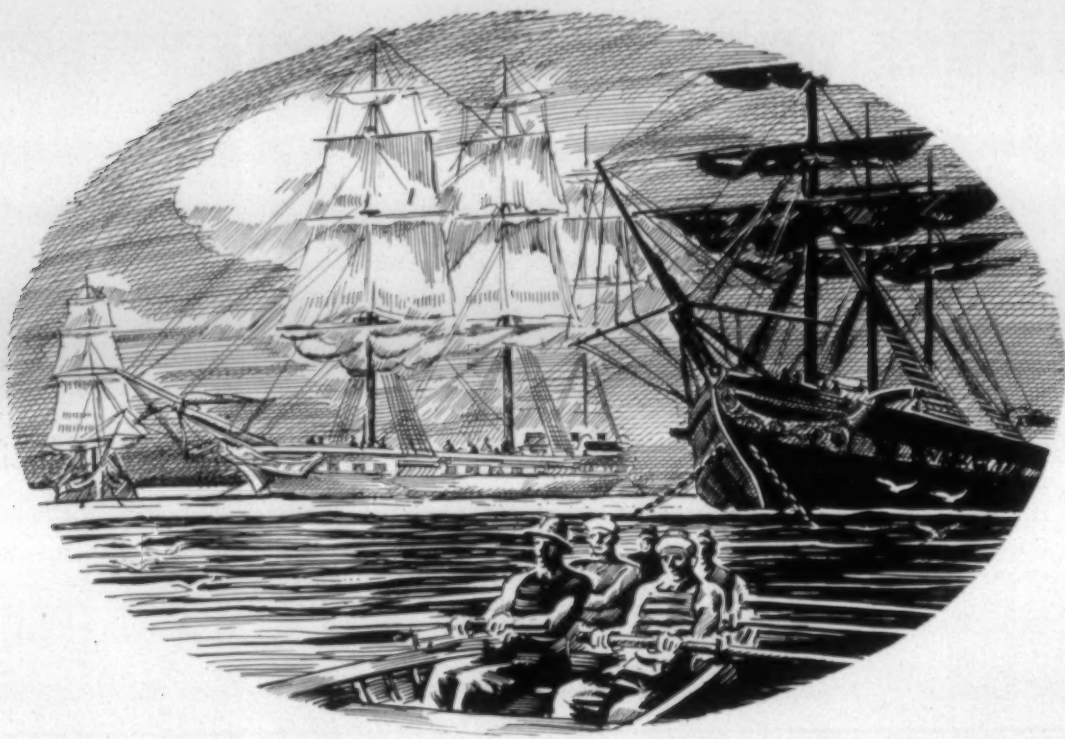


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And for 126 years we have continued to serve the Textile Industry . . . building bigger machines to increase productive capacity . . . designing new machines to meet special problems . . . helping the Textile Industry to grow from a handful of family-sized plants to its present position as America's Second Industry. We are proud to have played a part in its development.

Butterworth Service includes a complete line

of Machinery for bleaching, mercerizing, dyeing, drying, printing and finishing fabrics and warps; calenders for cotton and rayon fabrics; spinning machinery for rayon filament yarns.

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# *Dyeing and Finishing*

## A.A.T.C.C. Stages Victory Convention

**A**N intensive study of peacetime applications of war developments in textiles was featured during the three-day Victory Convention of the American Association of Textile Chemists and Colorists at New York City's Hotel Pennsylvania Jan. 3-5.

The convention, attended by more than 700 persons interested in the dyeing and finishing phase of textiles, began Thursday night with a President's Corporate Membership Dinner. The address of welcome was made by Emmett J. Driscoll, chairman of the association's New York Section. This was followed by President William D. Appel's discussion of "Textile Research of the A.A.T.C.C.," and a presentation of "The Consumer's Views on Textile Research" by Lew Hahn, general manager of the National Retail Dry Goods Association.

The Friday morning session was devoted to the discussion of peacetime applications of war developments, and on Friday afternoon reports were made by technical experts who investigated the German dyeing and finishing industry. General research was dealt with Saturday morning and the annual intersectional contest was staged that afternoon. Proceedings were concluded at the annual banquet Saturday night, when announcement of contest winners was made and the Olney Medal was presented to Dr. Milton Harris for outstanding achievement in the field of textile chemistry. Two exhibits were on view during the convention, one a display of various types of testing equipment developed by the research subcommittees of the A.A.T.C.C., and the other a display of fabrics, finished garments and accessories.

Dr. Harris, who directs the activities of Milton Harris Associates at Washington, was formerly director of research for the Textile Foundation and the Textile Research Institute, and at one time was an A.A.T.C.C. research associate. During the war a large part of his work was devoted to Army Quartermaster Corps projects, much of it on the determination of materials and clothing construction for various climates. He was a member of numerous important government committees.

Preceding the presentation of the award, Alban Eavenson, past president of the association, and Prof. Harvey A. Neville, head of the department of chemistry and chemical engineering at Lehigh University, paid tribute to Dr. Harris in two brief addresses on "The Medalist, The Man," and "The Medalist, The Scientist." The presentation was made by Alfred P. Howes, of Howes Publishing Co. Emmett J. Driscoll acted as toastmaster. In accepting the medal Dr. Harris spoke of the great unrest in the textile industry and called upon technologists to assume the research leadership of the industry. In this connection, Dr. Harris said in part:

"There appears to be little doubt that it is the task of

the technologist to assume the technical leadership of the textile industry and to map the technical paths for management. Before the technologist can assume this leadership, he must not only acquire a sound understanding of the technical problems of the textile industry, but also of the relationship of these problems to at least his phase of the industry. In other words, he must be able to bridge the gap between the practical concept and the scientific principle; and in order to do this, he must be suitably trained or must train himself.

"In a broad sense, the technical problems of the textile industry are basically the same as those in all industries; they involve the harnessing of a vast reservoir of scientific knowledge resulting from work in educational institutions, government laboratories, and industry. This knowledge does not stem solely from research in the field of textiles. It comes from work in the allied high-polymer field, whether it be on resins, rubbers, or plastics; it comes from work in chemistry, biology, medicine, or literally any field of science.

### New Fibers

"More specifically, the immediate problems of the industry are indicated by some of the recent trends in textile research, especially those during the war years, and it appears that much effort will be devoted along these same lines in the immediate future. One involves the production of new fibers, especially those having properties more desirable for specific uses. To the names of rayon, nylon, aralac, vinyon, and velon will be added many others. The principal limitations in the production of synthetic fibers will be the ability of the chemist to synthesize suitable polymeric molecules and from these build fibers of certain desirable mechanical properties, such as strength, flexibility and elasticity.

"Another line of work involves the development of chemical finishes capable of profoundly altering the properties of fiber, yarn or fabric. In spite of the impetus given such treatments by the war, there is still an enormous amount of work to be done in this field.

"Still another promising line of attack involves the modification of the chemical structure of the fiber to impart to it certain new characteristics. Just prior to the war, it was demonstrated that the chemical structure of wool could be so modified as to profoundly alter its mechanical, chemical and biological properties. More recently, a process was developed for modifying cotton to render it extremely resistant to attack by fungus. In addition, much more emphasis remains to be put on investigations directed towards a better understanding of the functional properties of fibers

and fabrics for industrial purposes as well as for clothing.

"Contrary to popular opinion, the country is not going to be presented at this time with many revolutionary textile materials or fabrics. The war simply accelerated the lines of work indicated earlier, but it will take all of our post-war efforts to bring these developments to their successful conclusion. Truly, it is difficult to find a more exciting or fruitful field of research for chemist, physicist, engineer, or physiologist.

"I make a plea again to the technologist to assume the research leadership by re-evaluating the problems of textile research and integrating them with his phase of the industry. I predict that any technologist who is ready and willing to understand the industry will find opportunities and scientific stimulation equal to those in any industry today."

Presented on this and following pages are abstracts of several papers delivered at the A.A.T.C.C. convention. Others will be published in later issues of TEXTILE BULLETIN.

## ***The Textile Research of the A. A. T. C. C.***

By WILLIAM D. APPEL

IN 1923, when the American Association of Textile Chemists and Colorists was formed, there were no generally recognized, satisfactory methods for evaluating dyes, textile chemicals, and dyed and finished products. A research committee was created at the first meeting of the council of the new association to develop such methods. This has been the primary task of the research committee during the past 25 years. From time to time, the committee has also undertaken research on the behavior of dyes, chemicals, fibers, yarns and fabrics under the conditions of textile processing. Such subjects as mercerization of cotton, carbonization of wool, and vat printing pastes, have been studied intensively. The object has been to learn what takes place during processing and to show the influence of processing conditions on the results.

Subcommittees of the research committee are charged with the protection of particular projects. There are at present 19 active subcommittees and 20 reference subcommittees which have completed their assignments and are retained for consultation. Much of the work is carried out in the laboratories of the members of these committees. Thus, the extensive knowledge of the members is pooled, existing laboratory facilities are utilized, work is expedited, and cost is minimized. This procedure is especially effective for the development of test methods, because the participating laboratories learn to use the methods as the work progresses and are ready to adopt them promptly when they are promulgated by the association.

As the research activities grew in complexity and importance some of them could no longer be carried out by members on a purely voluntary basis. Because of this, committees now are given assistance by the association's own laboratory which is maintained at the Lowell Textile Institute through the courtesy of that organization and its trustees. Still other committees have taken advantage of

the facilities and leadership available in colleges and government laboratories. Research associates have been maintained for particular projects at Brown University, the National Bureau of Standards, the University of Chattanooga and Lowell Textile Institute.

The test methods developed by the association are used in mill control, testing, and research laboratories throughout the country. Many of them have been adopted by the Federal Government, the American Society for Testing Materials and the American Standards Association.

### **New Research Director**

The co-ordination and guidance of the work of the research committee, its subcommittees and the paid staff, numbering in the aggregate over 200 persons, has been the responsibility of the chairman of the research committee, Dr. Louis A. Olney. During the past two years, Dr. Olney has had the help of an executive committee. On Dec. 1, Dr. Harold Stiegler became the association's first full-time director of research.

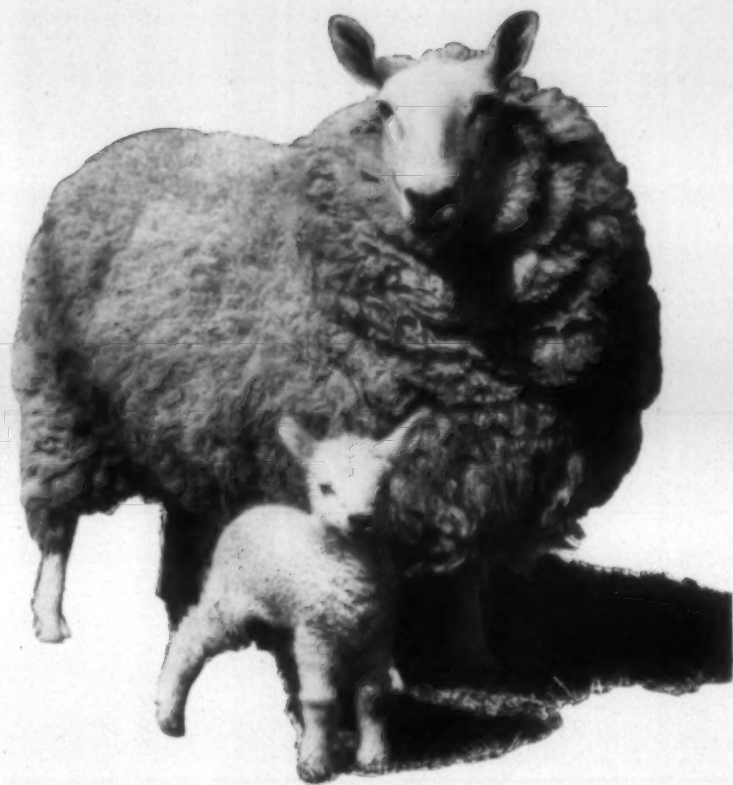
Although the association has maintained a steady, effective program of research for 25 years, its work is not done. Test methods have to be revised to meet new conditions. Recent demands for information labeling of textiles with respect to such performance characteristics as colorfastness, launderability, resistance to water, mildew, weather, and moths, flammability, qualities of other special finishes, and durability of performance, emphasize the importance of the work to the industry. The interest of the Federal Trade Commission in these matters emphasizes its importance to the public. The first step in an expanded program was to provide a full-time director of research. The second is to strengthen the association's laboratory at Lowell. A third

### **RHODE ISLAND SECTION WINS CONTEST**

The annual intersectional contest of the American Association of Textile Chemists and Colorists Jan. 4 resulted in the following awards: First prize, "Factors Which Cause or Prevent Agglomeration of Pigment Particles," presented by Raymond W. Jacoby of Ciba Co., Inc., for the Rhode Island Section; second prize, "The Mechanics of Zone Control in Resin Finishing," presented by Kenneth P. Monroe for the Northern New England Section; third prize, "Evaluation of Fabrics as to Their Flammability," presented by Charles W. Dorn of J. C. Penney Co., Inc., for the New York Section.

Other papers were: "Effect of Different Types of Dyestuffs on Rate of Deterioration of Cloth Exposed to Weathering," presented by Matthew T. Barnhill of Avondale Mills for the Southeastern Section; "Some Effects of Dry Heat Upon the Properties of Nylon Fabrics," presented by Arthur W. Etchells of Hellwig Dyeing Corp. for the Philadelphia Section; and "Practical Effect of Stretching Synthetic Yarns," presented by John E. Bell of Cleveland Cloth Mills for the Piedmont Section.

Kenneth H. Barnard of Pacific Mills presided at the session in his capacity of chairman of the intersectional contest committee.



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Yes, sir! Yes, sir! 10 DIFFERENT KINDS!

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step will be to select new projects and subcommittees to handle them. The subcommittees should be located throughout the sections of the association with members near enough together to meet frequently. Funds permitting, research associates should be employed in qualified local institutions for the more effective prosecution of the projects.

## **Science—The Key to Textile Testing**

By DR. EDWARD R. SCHWARZ

CONTINUING search for textile fibers demands improved techniques, improved equipment and higher levels of training of research personnel. Recent developments in textile research have come about largely as a result of these demands, and many of them became unusually important because of the war. In the work with natural fibers, much effort has been devoted to the study of methods for improving the quality and uniformity of cotton, wool, and various bast and leaf fibers, and for determining their properties. Continuing use of such processes as mercerization, resin treatment, acetylation, shrinkproofing, flameproofing and mothproofing require more and more sensitive means for evaluating the changes in resulting properties. The man-made fibers have posed similar problems

as to improvement in uniformity, strength and stretch characteristics, luster and resilience.

Increasingly, it is being realized that the physical behavior of fibers at loads and deformations less than the ultimate should be studied and are essential if textiles are to be "engineered" to give optimum results in special conditions of service. We are now finding that modern techniques and scientific equipment—particularly in the field of electronics—make possible the design and use of instruments capable of really revealing the fundamental properties of the specimen.

Intelligent use of these means and methods, in turn, hinges upon the availability of adequately trained personnel. It is exceedingly difficult, if not impossible, to appreciate the effect of variation in chemical structure upon the physical properties of a fiber, unless the investigator is familiar with the fundamentals of organic chemistry. Similarly, an investigator dealing with fiber masses, yarns and fabrics, must have knowledge of many of the basic principles of physical chemistry and of chemical engineering, particularly for air permeability and heat transmission research. The biologist is making increasingly important contributions to the field of textile technology. That branch of mathematics which we know as statistics is essential and furnishes the research worker with more and more powerful means for analysis and interpretation of properly determined data.

### **The Second Period**

We have progressed from the test period prior to World War I, where little or no attempt was made to control temperature, humidity, rate of load, rate of deformation, momentum, inertia or oscillation, through the period of attempting to control everything. This second era has seen the introduction of air-conditioning, tensile tests at constant rate of load, temperature control, extensive use of bursting, tearing and rupture tests. The emphasis is also swinging away from ultimate strength and stretch as unique criteria of performance, flexibility, creep, drape, friction properties, comfort factors, abrasion resistance, fatigue, impact, high frequency oscillation and dielectric properties. Instead of reliance upon simple tensile testers, twist testers, balances and low-power magnifiers, use is being made of the polarizing microscope, the photo-cell, vacuum tube detectors and amplifiers, electric strain gauges, oscillographs, high-speed photography, electron microscopes and X-ray diffraction apparatus. Wherever possible, results obtained by some one particular technique are being checked by one or more additional and different techniques.

Two important phases of textile research are going on simultaneously. There is, first, the measurement of inherent fiber properties. Second, there is the investigation mathematically and empirically of the "form factors" involved when fibers are put into yarns, and, in turn, yarns are put into fabrics. How the inherent properties are modified by these form factors is of tremendous importance to the industry. Excellent examples are to be found in such applications as tear testing, abrasion testing, impact burst and twist structure of yarns.

That continuation of research of this character is believed to be of great importance is evidenced by the express purpose of the Office of the Quartermaster General to continue intensive research on textiles, both in its own establishments

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## **Plastic Developments for Peacetime Textiles**

By DR. DONALD H. POWERS

**A**LTHOUGH the textile industry has always provided a large market for plastics, the study of their uses and applications in new fields during the war years appears to be opening far wider markets than were ever before envisioned. We find plastics being impregnated and incorporated into wool fiber to improve it and widen its fields of application. We find plastics as continuous films replacing fabrics and plastic fibers themselves. We find plastics as binders, firmly attaching to the natural and synthetic fibers materials which will impart greater mold, fire and water resistance; and a greatly increased percentage of our fabrics will be dyed and printed with colored pigments bound in with plastics. Finally, the sizing of warps and all types of yarns with plastics opens an entirely new and extremely large field for plastics.

Five textile developments involving plastics were selected as showing great promise in the coming years, and interest in these developments has certainly been catalyzed during the war. These are: (1) plastic films, (2) plastic impregnation, (3) plastic sizing, (4) plastic binders, and (5) plastic fibers.

When shipments of rubber were cut off at the beginning of the war, a great deal of effort went into the development of substitutes. As so often happens, these substitutes are here to stay and show promise of growing rapidly and gaining new markets of their own. Out of this work grew the development of lighter and lighter fabrics for coating purposes until finally the fabric was eliminated altogether, leaving "free films." These films are modified polyvinyl resins or cellulose ethers and esters plasticized or copolymerized to give maximum softness and ageing. Recently some excellent work has been done in printing these plastics films with engraved printing rollers.

The shortage of rubber and rubber latex during the war served as a stimulant for work on substitutes and synthetic latices for coating. The acrylate emulsions were known before the war, but their range of application was limited by their high cost and water sensitivity. Vinyl and vinyl butyral dispersions were developed which produced tough continuous films. These dispersions, as well as the copolymerized styrene dispersions, were developed for impregnating fabrics and could be used to produce excellent coated fabrics without the use of solvents. In the coating field there is still a tremendous demand for the low-cost nitrocellulose lacquers, and this demand may be expected to continue. However, more fire-resistant lacquers may be expected to grow rapidly in volume in view of recent legislation and emphasis on flame-resistant finishes. The greater fire-resistance will be achieved by the use of better suited plasticizers and less flammable cellulose esters.

Although the chemical processes of reducing wool felting were known for 25 years, the use of plastics for shrink-

proofing woolens and worsteds has had its entire growth and development during the war. By the use of selected melamine resins it has been possible to produce truly washable woolens with shrinkage of less than one per cent. While early work gave harsh, firm fabrics, improvements of resins and application techniques have resulted in both woolens and worsteds after melamine treatment which are soft as, or softer than, an equivalent untreated fabric, and the process has built into the wool fabric greater strength, durability, resilience, stability and weight. There is promise of woolen and worsted shirtings, dress goods, suitings, blankets and upholstery with new properties built into them by plastic impregnation.

Experience gained in the field of mildew, fire and water-resistant ducks showed the importance and value of durable water repellents, mildew repellents, and fire repellents. Actually, the role of plastics in this field is one of binder or carrier for the fungicide, pyroicide or hydrocide. At the present time the vinyls and the melamines are the most important and most promising in that they are excellent binders for the proofing agents and they themselves have a mild proofing action. In the field of fireproofing wartime studies have shown that the best fireproofing agents are catalysts which alter the heat decomposition products of cellulose. Here again, the fixation of these catalysts with non-flammable resins gives us better proofness than we have been able to achieve heretofore. It was found that hydrophobic chemicals on the surface of the fabrics gave superior water repellency, and the problem of binding these materials to the surface of the fibers became one of selecting the proper plastic binder which would not increase water or moisture pick-up.

### **The Plastic Yarns**

Some extremely important work was done during the war on the function of fabrics and the effect of thickness, porosity, absorbency, smoothness on their warmth, comfort and coolness. In this connection, some outstanding shoe fabrics were woven of nylon staple. All these studies have given us cause to reconsider the components which we build into new fabrics. Vinylidene chloride yarns found important wartime use for screening in the tropics. While it will be interesting to see whether these plastic yarns can compete with lower cost metal screening when the latter becomes readily available, there is no question that the vinylidene chloride yarns will prove of importance and value in the upholstery field where smoothness and toughness may be combined with styling and design.

Certainly, use of nylon will continue to grow at a tremendous rate, but here especially will it be important to design fabrics with nylon and nylon blends which take the fullest advantage of the high elasticity and resilience of the nylon, as well as its low moisture absorbency and coolness of feel.

Climatic laboratory studies have shown that we can wear winter clothing one-quarter as heavy as our present garments with equal warmth and correspondingly greater comfort. All this indicates that peacetime clothing can be superior to any we now use if we will select the fibers, natural or synthetic, and blend them to produce fabrics and garments whose functions are directly related to their use, based on our better understanding of the factors involved.

The plastic fibers should play an important part in the development as they contribute materials of outstanding

strength, of high elasticity, and with extremely low moisture absorption and outstanding surface smoothness and touchness. As we learn to take advantage of these unique properties we shall develop functional fabrics of superior performance. Certainly, here is one of the largest and most important markets for plastics in the post-war textile field.

## ***The Developments in Viscose Rayon***

By DR. F. BONNET

THE greatest single development in viscose rayon production during the war years was the remarkable increase in output of the strong, tough yarns needed for making tire cord, cargo chutes, tapes, and other items for military use. Included among the peacetime applications for these high-strength yarns are women's hosiery, upholstery, carpet backings, linings, garments for rough wear, lightweight luggage, and various industrial fabrics. In addition, developments in rayon staple have gone on apace, and several important improvements have occurred in the dyeing and finishing of rayon fabrics.

In 1944 some 724 million pounds of rayon were produced in this country, which is almost twice as much as was produced in 1939 at the beginning of the war. This includes viscose, acetate and cuprammonium rayon—both as continuous filament yarn and as staple. The pressure which was put upon the rayon industry to increase strong yarn production was tremendous so that the production of ordinary yarns for civilian use was curtailed to a minimum. Rayon tire yarns had, of course, been used in bus and heavy duty truck tires quite a number of years before the war with rather phenomenal success, but it was not until some time after Pearl Harbor that the armed forces began demanding an ever-increasing production of tire yarn. For the first nine months of 1945 some 137 million pounds were produced as compared to only nine million pounds for 12 months in 1939. Although the process of making strong rayon yarns was well known before the war, the pressure for war production and expansion has doubtless put the industry ahead in this field by about ten years.

For tire yarn production, the size of the filament was around 2 1/3 denier. The general information gained in spinning the strong and regular yarns led directly to the development of semi-strong yarns of only one denier per filament. Such fine multifilament yarns as, for example, 100 denier with 100 filaments or 75 denier with 75 filaments, have made it possible to produce many new and attractive fabrics whose characteristics are quite different from those using the pre-war type of rayon with heavier filaments. Just as tough tire yarns had originally been developed before the war, hosiery yarns made of strong viscose rayon had also been developed, had in fact gone through the testing and trial period and were just about to be introduced to the trade when the war stopped all further production of this yarn for civilian use. This kind of yarn was then too urgently needed for the armed forces and could not be spared for women's hosiery.

The regenerated cellulose types of rayon have a fairly high moisture absorption. This relatively high moisture absorption is very good when the fibers as yarn and fabric

are to be used for diapers and similar absorptive uses, but is not so good in stockings. Curiously enough there is but little difference in moisture absorption between regular and the stronger type of viscose rayon, even though the latter has a much higher wet strength and shows a smaller proportional wet-strength loss. When viscose and other regenerated cellulose types of rayon absorb water, the fibers swell and in this swollen condition are more easily abraded than when dry.

Two treatments which are still in the initial stages of production development have given considerable promise. Thus a comparison after 40 launderings and folded ironings of many kinds of test fabric treated and untreated seems to indicate that while the untreated fabrics all showed unsatisfactory shrinkage and wear, and some were even severed at the ironing old, the treated samples showed less than one per cent shrinkage and little if any wear at the ironing fold. A third method has also been employed to reduce shrinkage and to stabilize fabrics; namely, the application of resin finishes.

The expansion of rayon staple production, particularly viscose staple, in the near future promises to be extensive. The versatility of the fibers, and the yarns and fabrics made from them, seems limitless. Treated to make it water repellent and resilient, rayon staple is finding use as pillow stuffing which is of particular interest to those who are allergic to feathers. In the coarser filament sizes it has found some use in upholstery stuffing. Even baseballs have been made with spun rayon cord. On the other hand, one denier per filament rayon staple has been spun into very fine yarns for handkerchiefs of great softness and delicate texture. Blended with fur hair some interesting fabrics have come on to the market. These have some 70 or 80 per cent rayon staple blended with fur hair and cotton, and are remarkably soft, warm and appealing.

But developments and improvements in the production of rayon and rayon staple do not progress by themselves alone. Thus apparel, drapery fabrics and household furnishings require colors which are fast to light and washing, and the vat and other fast colors are necessary to really increase the large potential uses for rayon in this field. Although these fast colors cost more than the ordinary direct colors, the main difficulty has been the much higher cost of application. Recent machinery developments demonstrated that in the near future it will be possible to dye fabrics with the best fast colors at a cost no greater than the present cost of dyeing with direct colors.

## ***The Developments in Acetate Rayon***

By DR. HAROLD D. SMITH

AMONG the dozen or more military uses of acetate rayon are included tow-targets, lint-free wiping cloths, and navy neckerchiefs, officers' summer clothing, fluorescent signal panels, fused-edge tapes, electrical insulation, and mildew-resistant fabrics. The developments of the war years indicate that the normal growth of acetate rayon as a versatile textile fiber will be materially accelerated by its intelligent use because of some of its distinctive properties—thermoplasticity, electrical (Continued on Page 47)



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## PERSONAL NEWS

Walter T. Slaughter of Candlewick Yarn Mfg. Co. at Dalton, Ga., has been elected president of the Cartersville (Ga.) Chamber of Commerce.

W. Mitchell Carlisle has been promoted from superintendent of the Ladlassie Plant of Gossett Mills, Anderson, S. C., to general superintendent of all of that company's plants. C. C. Chavous, Jr., has been transferred from superintendent of the Toxaway Plant to a corresponding position at the Riverside Plant.

Andrew B. Calhoun has been elected president of the Equinox Mill at Anderson, S. C., to succeed Charles A. Sweet, who resigned recently. Mr. Calhoun has been with the plant since 1931, and has been vice-president and general manager since last May.

H. M. Brigham has been appointed head of the cotton goods department of Glen Raven (N. C.) Cotton Mills, with sales office in New York City. The Glen Raven company, headed by J. H. Bumstead, is a direct sales organization. Mr. Brigham has been associated with Wellington Sears & Co. Jack Ferry will succeed Mr. Brigham at Wellington Sears.

Robert M. Bourdeaux, Jr., has joined the staff of the American Cotton Manufacturers Association as a field man in charge of research. Mr. Bourdeaux is a native of Meridian, Miss., and has been with the Fourth Regional Labor Board in Atlanta, Ga., for several years. His work with the association will consist of visiting mill executives who are members of the organization and serving as a medium through which they may exchange experiences. He also will make studies on a number of angles of cotton manufacturing and the association will, from time to time, publish bulletins giving digests of his findings.



Dr. Milton Harris, left, one of the foremost scientists on fundamentals of fiber structure in this country, has been appointed Visiting Professor of Textile Chemistry at the Polytechnic Institute of Brooklyn. In his teaching at Polytechnic, Dr. Harris, who has just received the Olney Medal of the American Association of Textile Chemists and Colorists for outstanding achievement in the field of textile chemistry, will be associated with the Highpolymer Research Institute.

John R. Hester, vice-president, assistant treasurer and a director of North Carolina Fabrics Corp. at Yadkin, N. C., has assumed the additional duties of plant manager following the resignation of John J. Valter. Mr. Hester has been with the company since its organization in 1935.

Appointment of Dr. Waldo H. Kliever to the newly-created post of director of research has been announced by Minneapolis-Honeywell Regulator Co. of Minneapolis, Minn. The new director will co-ordinate research activities in all Honeywell divisions in Minneapolis, he said, and in addition will instigate new research projects in the field of automatic control devices.

Arthur Crossley, formerly vice-president in charge of operations for Wauregan (Conn.) Mills, has joined Callaway Mills at LaGrange, Ga., for specialized duties. He has devoted a great deal of time during the past five years developing wools and worsteds on the cotton system and is considered an authority among blended yarn and fabric manufacturers.



J. C. Mahaffey, left, has resigned from Rushton Cotton Mills at Griffin, Ga., and has joined E. F. Houghton & Co. as slashing and weaving service engineer in the South, with headquarters at the company's Charlotte offices. He will have the same duties as did the late J. H. Reid.

Stuart W. Rabb, Sr., well known in the Southern textile industry, has been awarded the Army Service Forces medal for meritorious civilian service as consultant on textiles to the Quartermaster Corps.

Floyd T. Ridley has been named traffic manager of the Calco Chemical Division of American Cyanamid Co., Bound Brook, N. J., and assumed his duties Jan. 1. He has been associated with the Kansas City Southern Railway Co. as director of development.

John O. Logan has been appointed assistant general manager of sales for Mathieson Alkali Works. With Mathieson since 1931, he will make his headquarters in the New York City offices of the firm.

George H. Lanier, president of West Point (Ga.) Mfg. Co., has been elected a director of the First National Bank of Atlanta.

Robert G. Dort has been appointed manager of staple fiber and spun yarn sales for Celanese Corp. of America. Joining Celanese in 1925, he has had a wide experience with that corporation in work that took him into textile research, fabric development, sales and converting. The sales of the corporation's staple fiber and spun yarn recently have been put under his supervision.



Stanley P. Hunt, left, has been appointed to the staff of the Institute of Textile Technology, Charlottesville, Va., as head of the mechanical engineering division. Mr. Hunt received his B.S. degree in mechanical engineering from Kansas State College in 1919. After teaching at Kansas State and at the University of Wyoming for a number of years, he became associated with the radiation laboratory of the Massachusetts Institute of Technology in 1942.

Alden Hayes Emery has been elected secretary and business manager of the American Chemical Society. Mr. Emery, a former official of the United States Bureau of Mines, succeeds Dr. Charles L. Parsons, who retired Dec. 31, after serving the society as secretary for 38 years and as business manager for 14. Mr. Emery has been the society's assistant manager since 1936 and assistant secretary since 1943.

Dr. W. A. LaLande, Jr., has been appointed director of the Whitemarsh Research Laboratories of the Pennsylvania Salt Mfg. Co. Dr. LaLande, formerly director of research of the Attapulugus Clay Co. and previously a member of the chemistry faculty of the University of Pennsylvania, joined Pennsalt in August, 1944, as director of the research division. In his new position, he will have charge of all activities at the new Whitemarsh Research Laboratories except those of the patent division. These activities include laboratory research, pilot plant operations, product evaluation studies, and technical sales service work.

Lewis S. Trundle has been named manager of the Washington office of the Cotton-Textile Institute. He succeeds Owen Fitzsimons, who resigned recently to become executive secretary of the Carded Yarn Association. Prior to joining the institute, Mr. Trundle was assistant chief of the cotton and synthetic textiles branch of the Civilian Production Administration and before that chief of the cotton yarn branch of

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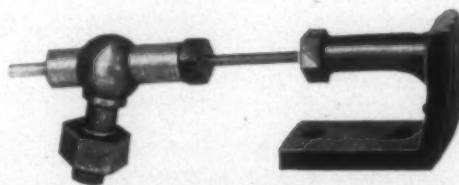
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the War Production Board. For more than three years he was connected with the Wage and Hour Division of the Department of Labor and was second in charge of the regional office at Richmond, Va. He also served for two years as secretary of the Underwear Institute and during NRA days was assistant executive secretary to the code authority of the knit underwear and allied products industry. He was at one time chief of the wearing apparel and knit goods division of the Department of Commerce. He has had considerable experience in the merchandising of textiles, having been a buyer for ten years of women's ready-to-wear for Frank R. Jelleff's, Inc., and M. Philipsborn Co. He served in the Navy in World War I.

Frank Slack, president of the Cotton Yarn Distributors Association, has been elected president of the Philadelphia Trade Association Executives.

Jasper C. Osborne, manager of the factoring division of the Trust Co. of Georgia, Atlanta, has been elected a vice-president of the organization.

Don H. W. Felch has been appointed manager of the new Willow Island, W. Va., plant now being constructed for the Calco Chemical Division of American Cyanamid Co. Prior to accepting the new post he was assistant chief engineer at Calco, specializing in dyes, pigments and plastics. Before joining the Calco staff 12 years ago, Mr. Felch was engaged in plant engineering with companies in the Midwest and East. The new manager received his engineering training at Ohio State University.

Miss Gwin Barnwell has been chosen as the National Cotton Council's Maid of Cotton for 1946. She is the daughter of Mrs. Mildred Gwin Barnwell Andrews, former executive secretary of the Southern Combed Yarn Spinners Association. Miss Barnwell is a graduate of Duke University.

Azel W. Mack, pictured at left below, has been appointed president of the textile chemical division of Dexter Chemical Corp., New York City. For the past five years he has been associated with Hart Products Corp., and at present is secretary of the



Northern New England Section of the American Association of Textile Chemists and Colorists. . . . Mortimer Bayer, right above, with Hart Products for the past ten years, has been appointed to the Dexter sales staff.

Julian R. Taylor has been appointed sales manager of Jarrett Chemical Co. of Newton, N. C., a concern which serves textile mills. For the past several years, Mr. Taylor has been sanitarian for the Catawba County health department.

Stephen S. Marks, for 18 years rayon editor of *Daily News Record*, has been named associate editor, effective Jan. 15, a new post in which he will serve directly under Harry Riemer, editor. Mr. Marks is a graduate of Philadelphia Textile Institute and formerly was associated with American Celutex Corp. and Bruns Nordemann Co., Inc. . . . Harry Jefferis, who has been in charge of the dyes, chemicals and finishes section of the *Record*, will become rayon editor. He is a graduate of Wesleyan University, Middletown, Conn. . . . Kenneth A. Howry, recently returned to the *Record* after service with the U. S. Army, will be in charge of the dyes, chemicals and finishes section of the paper. Prior to joining the Army, he was associated with the paper in several editorial capacities.

William B. Ferguson, formerly acting chief of the textile section, Office of Exports, Foreign Economic Administration, and its chief licensing officer for rayon, has joined the export department of American Viscose Corp. Mr. Ferguson studied chemical engineering at Massachusetts Institute of Technology and is a graduate of Colby College with a B.S. degree. He also holds a degree from North Carolina State College, where he specialized in textile studies.

**WITH THE MILITARY** — Maj. James A. Ferguson, a veteran of four years' service in the Army Signal Corps, is now assistant to the manager of Springs Cotton Mills Plants Nos. 1 and 2, Fort Mill, S. C. . . .



Comdr. Robert Leeson, left, has been re-elected president of Universal Winding Co. at Providence, R. I., following his release from the Naval Reserve. Parkman D. Howe, who served as president during Commander Leeson's four-

year absence, is now executive vice-president of the company. . . . Maj. Richard Brannon has been discharged from the Army and has resumed his former duties in the dyeing department of Burlington Mills Corp., Greensboro, N. C. . . . Lieut.-Comdr. Ford B. Draper, now out of the Navy, is again manager of rayon staple fiber sales for the E. I. du Pont de Nemours & Co. rayon department in New York City. . . . Col. Herman C. Kliber, director of procurement for the Philadelphia Quartermaster Depot, has retired from the Army effective Jan. 15. Lieut.-Col. Lawrence B. Illoway has succeeded him in the procurement post. . . . Lieut.-Comdr. Donald L. Herr, now on terminal leave from the Navy, has been appointed manager of the research and control division of Sidney Blumenthal & Co., Inc., with headquarters in New York City. . . . Capt. James C. Stirling has completed three years of Army service and has been named manager of the New York City textile office of the American Institute of Laundering. . . . Thomas P. Parks, associated with Collins & Aikman Corp. at Roxboro, N. C., before entering the Army, has been released from service and has joined the purchasing department of that company.

J. C. Roberts, Robert L. Gurney, Harold Lineberger, S. M. Butler, S. A. Burts, D. R. Lafar, Sr., and R. Grady Rankin, all textile plant officials, have been named trustees of the Gaston Memorial Hospital now being planned at Gastonia, N. C.

Dr. William Talbot, the technical director and secretary of Sun Chemical Corp., shown at left below, has been named president of the company's fine chemical division, which includes the recently acquired Warwick Chemical Co. Ernest Nathan continues as



Warwick president. . . . Ira S. Hurd, at right above, has been appointed director of textile application for Warwick Chemical Co., with offices at the West Warwick, R. I., plant. Mr. Hurd formerly was superintendent of the technical department of Riverside & Dan River Cotton Mills, Inc., Danville, Va.

C. E. Slocum, vice-president of Chicopee Sales Corp., has been elected chairman of the textile section of the New York City Board of Trade. D. E. Douty, president of United States Testing Co., was named vice-chairman, and Robert E. Gregg of Kendall Mills Co. was appointed representative to the board of governors.

Aubrey Hobbs has succeeded the late D. D. Towers as general manager of Anchor Duck Mills at Rome, Ga. Mr. Hobbs has been associated with Anchor Duck since last May.

## OBITUARY

**Donigan Dean Towers**, 63, for the past 18 years vice-president and general manager of Anchor Duck Mills at Rome Ga., died Jan. 2 in a Rome hospital.

**John T. Woodside**, 82, retired textile pioneer in South Carolina, died Jan. 5 at Greenville, S. C. He was the first president of Woodside Cotton Mills, and at one time was president of Easley (S. C.) Cotton Mills. He is survived by one brother, Robert T. Woodside.

**Samuel Howard Ballard**, 79, for 42 years assistant overseer of weaving for Revolution Cotton Mills at Greensboro, N. C., died Jan. 5 following an illness of two years.

**Manning T. Twitty**, 69, former treasurer of Hartsville (S. C.) Cotton Mill, died Jan. 14. He is survived by his wife, daughter, son and two sisters.

**Charles W. Gunter, Sr.**, 57, cotton buyer for Textiles, Inc., at Gastonia, N. C., died Jan. 12 following a heart attack. He is survived by his wife, son, daughter, brother and two sisters.

# For the Textile Industry's Use

## EQUIPMENT — SUPPLIES — LITERATURE

### Bridgeport Brass Co. Now Making Insecticide Bomb

The Bridgeport Brass Aer-A-Sol insecticide bomb, as announced by the Bridgeport Brass Co., Bridgeport, Conn., is described as being an economical and effective new multi-pur-



pose method for ridding commercial buildings of flies, cockroaches, ants, mosquitoes, gnats, fleas, bedbugs, moths, and similar pests. The insecticide mixture expelled from the bomb is a formula developed by the U. S. Department of Agriculture. It contains two per cent of 20 per cent pyrethrum extract for "knock-out" effect on insects and three per cent DDT to assist in the final kill. These active ingredients are dissolved in naphthalene solution and the entire mixture is combined with non-inflammable liquified Freon gas, which acts as a propelling force. The Bridgeport Brass Aer-A-Sol container is described as long-lasting and safely made.

### Reiner Creels Presented In New Company Catalog

An illustrated catalog presenting creels as manufactured by Robert Reiner, Inc., Weehawken, N. J., has been issued by the company and is available upon request. The line of creels by Reiner includes the jack creel, truck creel, special duty and magazine

creels. New and improved features to the creels are illustrated with close-up photographs. The section devoted to creels is supplemented by one treating of the Reiner line of full width and sectional warping equipment.

### Lint Interceptor Device Developed By J. A. Zurn

A new cast iron lint interceptor has been developed for use in industrial plants where lint and wiping waste gets into drainage lines and clog them. The interception function is accomplished by a perforated strainer of plain or galvanized metal to which may be attached a brass or copper basket of suitable mesh. The intercepting basket is easily removed, inspected and cleaned. For service conditions where necessary, the basket has an open bottom and all dirt and sediment can be

brought out through the bottom blow-off connection.

The unit is built for working pressures up to 150 pounds. It cannot become airborne as the openings through the basket are on a line with the top of the pipe. The cover is bolted and dura-coated while the body is made of cast iron. It is available with flanged I. P. S. connections in various sizes. Further information may be secured from J. A. Zurn Mfg. Co., Erie, Pa.

### Rohm & Haas Develops Mildew-Proofing Agent

"Hyamine 3258," a new mildew-proofing agent, has been developed by Rohm & Haas of Philadelphia, Pa. Having proved its effectiveness in laboratory and field tests, the fungicide was released to the trade for use in

(Continued on Page 44)

# VICTOR MILL STARCH

*Always A Winner!*

Distributed by

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**THE KEEVER  
STARCH CO.**  
Columbus 15, Ohio

# textile bulletin

Published Semi-Monthly by

## CLARK PUBLISHING COMPANY

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## A Strange Position

Approximately 5,100 employees of the Erwin Cotton Mills have been out of work since Oct. 8. On that date the Textile Workers Union of America, C.I.O., called the strike.

It is not unusual for an outsider to settle disagreements under the terms of a contract, but in the case of the Erwin Cotton Mills the C.I.O. insisted upon outsiders writing portions of a proposed contract and shut down the mills when the Erwin Cotton Mills refused.

If an outsider is to decide the terms of a contract with employees, it might be just as well to have some government agency or super judge make the decisions and relegate management and labor to the role of puppets.

Among the union's unmet demands are the following:

Full pay for six holidays not worked.

Pay the total costs of ALL of the following insurance benefits for each employee: Life insurance, accidental death and dismemberment insurance, health and accident benefit insurance, hospitalization and incidental insurance benefits, maternity benefit insurance, medical care benefit insurance, and surgical care benefit insurance.

One week's wages for each year of service with the Erwin Mills if an employee is laid off due to technological changes in manufacturing.

A 30-minute paid lunch period.

These demands are unreasonable, unfair and dishonest and are basically an effort to obtain pay for services which are not rendered.

It is an effort to take the Erwin Cotton Mills by the throat and take from them money which has not been earned by the employees.

The C.I.O. is in the same category as the highwayman who takes money from the pockets of a traveler while holding a pistol to his head.

None of the strikers carry the same principle into their own lives.

Those who employ Negro women to do their washing would refuse to pay for more washing than was done.

If the grocer delivered two bags of flour but demanded pay for three, they would call him a cheat.

If the doctor who treated one child demanded the same pay as if he had treated the entire family, they would never employ him again.

They would refuse to pay for life insurance, accident insurance, hospitalization, etc., for the washwoman, grocer or doctor.

The Erwin Mills has offered its employees opportunity for earning the highest cotton mill wages that are paid in the South. The work required is no greater than that in other well-operated mills throughout the South.

The C.I.O. is demanding that the company pay for things which belong to the private lives of the employees and are trying to force compliance with unreasonable and unjust demands under the threat of causing losses to the company by reason of suspended operations.

The washwoman, the grocer and the doctor know that if they made any such demands upon the mill employee no one can prevent them from employing other washwomen, grocers and doctors.

The mill employees make unfair demands upon the company, that is, demand pay where no service is rendered, but by picketing refuse to permit the mills to secure the services of other textile workers in the same manner that they themselves would claim the right to secure the services of other washwomen, grocers and doctors.

The employees of the Erwin Cotton Mills are essentially dishonest in demanding pay where no services are to be rendered and their methods differ very little from the highwayman who by threat of harm takes money from a traveler.

There is a Biblical passage that says that "a laborer is worthy of his hire," but nowhere does the Bible intimate that it is right for a laborer to take his employer by the throat and take from him things which have not been earned by his labor.

Recently the C.I.O. signed a contract with a cotton mill not far from Durham, N. C.

The Erwin Cotton Mills immediately offered to sign a similar contract but the C.I.O. refused, which was indeed a strange position to take.

An organization which has been prating about equal treatment for all employees refused to give equal treatment to all mills.

They have the Erwin Cotton Mills by the throat and in typical highwayman style seek to rob them of the last possible penny.

## Sound Senators

We do not think that anyone can justly accuse the two United States Senators from North Carolina, Josiah W. Bailey and Clyde R. Hoey of being antagonistic to labor or unsympathetic with those who earn their living with their hands.

On the other hand, they are not so blinded by fear of the votes of members of organized labor, as are many members



of Congress, that they are willing to sacrifice the inherent rights of all citizens of this country.

We quote the following newspaper dispatch:

Washington, Jan. 14.—Declaring that President Truman had asked Congress to take his plan for settling strikes or to propose one of its own, North Carolina's senior senator, Josiah W. Bailey, returned to Washington today from his home in Raleigh with his own proposal for settling strikes.

Believing that the plan he proposes "will get us somewhere" Senator Bailey, at the proper time, will offer legislation to revise the Wagner Act so as to "encourage collective bargaining." He believes the present strike situation is due to failure of collective bargaining.

Senator Bailey contends that the present law encourages strikes and that we must get rid of the doctrine of the closed shop. "We must establish the open shop and we must put employer and employee on an equal footing in bargaining," said Senator Bailey. "Under the present setup, the employer is cut off. While the labor agitator can say what he pleases, the employer must keep his mouth shut," said Senator Bailey.

Wages based on the ability of a firm to pay will destroy uniformity of wages, Senator Bailey believes. He said that the fact that a firm makes money one year does not mean that it will do the same next year. Under the President's proposal, Senator Bailey contends the stability of wages would be lost.

Speaking at the annual meeting of the Gastonia (N. C.) Chamber of Commerce Senator Hoey said, in part:

We have fought for freedom and liberty for the world, and we must not fail to preserve this liberty and freedom for the people of America. We are standing at the crossroads.

There are strong forces in the country seeking to infiltrate our democratic processes of life with so many socialistic or communistic philosophies that our whole economic system and our boasted free enterprise is seriously endangered. These groups want the government to take charge of all business and provide a planned economy and they are carrying these policies just as far as they dare go now.

A planned economy means a regimented people and this results in a totalitarian government. Our laboring people would have the most to lose by the destruction of democratic processes, and yet by the policy of continued strikes they are playing into the hands of the very forces which would destroy their freedom and liberty. They ought to investigate the condition of labor in all totalitarian countries and see the practical serfdom which prevails among the workers. National socialism or state communism buries the workers in the mass of controlled and regimented subjects denied the right to live their own lives or enjoy the fruits of their own labor.

In my opinion the Congress should take definite action in the field of labor relations. Without delay the National Labor Relations Act should be amended and its one-sided and unfair provisions repealed. There should be equality before the law for labor unions and management. Now there is unjustified discrimination in favor of labor unions. Both labor and management should be held equally responsible for their contracts and made to respond in damages for violating agreements. Both should be held accountable for their acts.

The right to strike is guaranteed under the law. This carries with it the right to peacefully picket. But there is no authority of law for using violence or force to prevent the owners of a plant or workers from crossing picket lines and entering to work, even though a strike is in force.

The unions must realize that the right to work is just as sacred as the right to strike, and the law must guard zealously the right of any person to work, regardless of strikes. So many of these strikes which paralyze business and cause widespread suffering, like the recent coal strike and the present General Motors strike, are unauthorized and brought about by ambitious labor leaders and a minority of the workers in the union, but all of them suffer as a result and lose public sympathy.

The public is thoroughly fed up on strikes and properly demands legislation to curb these wildcat strikes who do not wish to strike and to a long suffering public.

I believe in reasonable wages and good working conditions for all workers and the whole country sympathizes with all legitimate demands of labor for just compensation to meet the increased cost of living, but I am not in favor of determining this question by the amount of profit a business may be making, or its ability to pay.

Should that method be employed, then when profits decreased and business was bad, the workers would be the sufferers. The government has no right to take charge of the business of any company for the purpose of regulating its management or controlling its profits. If free enterprise is to continue and jobs be provided for the workers of America, we must have business freed from governmental controls and regulations—so long as the law is obeyed—and give full encouragement to industry to grow and expand. We cannot afford to penalize efficiency and good management by making them pay higher wages than their less successful competitors, merely because they have the ability to pay. The interest of the public must be considered in the decreased cost of the product manufactured.

The time has come when this whole question should be dealt with from the standpoint of the public interest. Pressure groups and minority factions have too long been favored in legislation and by the courts. The people should demand equality before the law for all, and cease this special favoritism for organized groups. The public interest should be paramount.

With the adjustment of our domestic disturbances and the gearing of industry and agriculture to full production, America should enter upon a period of unprecedented prosperity and abundance for all. The common man should attain a higher standard of living and greater opportunity for his children in the tomorrows to follow.

In this day when so many Congressmen and Senators cringe before labor racketeers and vote as they are told to vote by John L. Lewis, Philip Murray and others, it is refreshing to find that both the North Carolina Senators are opposed to permitting organized labor to have the right to trample upon the liberties of any and all citizens of the United States.

## Cost of Producing Cotton

On page 48 of this issue we are reprinting, from *Extension Farm-News*, published by the Agricultural Extension Service of North Carolina State College, an article relative to prizes awarded in the North Carolina Five-Acre Cotton Contest.

It is stated that the prize winner produced his cotton at a cost of approximately eight cents per pound, which is considerably lower than is generally thought possible.

The prize winner, of course, selected the best five acres he could find and used both fertilizer and labor in excess of what was normally used upon other areas of his farm. It is admitted that the season was exceptionally favorable and that there was no boll weevil damage.

About the only thing proved by the Five-Acre Cotton Contest is that under special conditions, and with special care over a limited area, cotton can be produced for eight cents per pound, or, in other words, that eight cents is about as low as cotton can be raised under any conditions.

Any experienced mill man can take one spinning frame and after making careful adjustments run it at a very high front roll speed and obtain an unusual production.

By the same token, a man can select five acres of exceptionally good land, cultivate it intensively, use a large amount of fertilizer and produce cotton at eight cents, but it is a fact that there are very few farmers in the South who can produce cotton at an average cost of less than 15 cents.

# MILL NEWS

CONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASES

GREENWOOD, S. C.—Carolina Fabrics, Inc., of Greenwood, with a capital stock of \$10,000, has been chartered to deal in textile products. Officers are J. B. Harris, president-treasurer; J. C. Self, vice-president, and H. W. Brunson, secretary.

LINCOLNTON, N. C.—Southern Spinners at Elm Grove has been incorporated to deal in textile fabrics, with an authorized capital stock of \$50,000. Stock in the amount of \$300 was subscribed by W. M. Lentz, Edgar Love, and Thomas C. Smotherman, all of Lincolnton.

DUE WEST, S. C.—Chickasaw Fabrics, with \$33,000 capital stock, has been organized to manufacture cotton, rayon and woolen goods. Officers are W. L. Roddey, president and treasurer, and E. C. Roddey, vice-president and secretary, both of Due West.

ROCKINGHAM, N. C.—A Burlington Mills Corp. subsidiary known as Steele Mfg. Corp., which will act as the operating control of Steele's Mills of Rockingham, has been formed with an authorized capital stock of \$5,000,000. Incorporators are Stephen L. Upson, Gilbert Powell and Douglas Orr of Greensboro, N. C. Subscribed stock was \$300.

GREENSBORO, N. C.—Stockholders of Burlington Mills Corp. have voted to authorize 50,000 additional shares of cumulative preferred stock with par value of \$100 per share. Also authorized by the stockholders were 150,000 shares of second preferred stock at \$100 per share and convertible. If sold in the future, this stock will have a dividend rate of not more than four per cent. The authorizations by stockholders, recommended by directors, places the company in a flexible condition by maintaining working capital and providing for requirements for additions and improvements to existing properties under consideration by the company.

CHARLOTTE, N. C.—Highland Park Mfg. Co. and Johnston Mfg. Co. will spend \$300,000 for improvements to three of their textile plants. Highland Park will spend \$200,000 in expanding its No. 3 mill here and its No. 2 Plant in Rock Hill, S. C. Johnston will spend \$100,000 in expanding its local plant. Both firms have headquarters in Charlotte. At Highland Park Mill No. 3 a one-story addition to the weave room will be constructed and at Mill No. 2 a two-story slasher room will be built. A two-story structure will increase the capacity of the Johnston mill's spinning department.

CHINA GROVE, N. C.—China Grove Cotton Mills will construct a new addition to house 15,000 spindles. The unit will contain 70,000 square feet of floor space and will provide employment for more than 250 additional workers. When the new construction is completed it will give the mill 67,000 spindles and more than 800 workers. The mill spins yarn and sells it to independent thread manufacturers.

WADESBORO, N. C.—The newly-formed Little Cotton Mfg. Co. has begun leased operation of the Anson Mfg. Co. yarn mill in Wadesboro, after having secured a charter to manufacture yarns and textile fabrics. The authorized capital stock is \$100,000 and subscribed stock, \$3,000. Incorporators are C. L. Little, W. Bryant Moore and W. L. Bennett, all of Wadesboro.

DALLAS, TEX.—A 20-foot extension is now being constructed to the local mill of Texas Textile Mills, providing for four new offices. Expansion of the offices is made imperative by the addition of the new printed goods, part of the mills' reconversion program. A new cotton warehouse will be built in addition to those already in use.

GREENVILLE, S. C.—The recently chartered F. & S. Realty Corp. has purchased the plant of Bahan Textile Machinery Co. here reportedly for \$75,000 for use by Plexon, Inc., in the manufacture of plastic coated yarn, production of which is scheduled to begin on or before March 1. William F. Hawkins, Jr., of Greenville has been appointed manager. The new plant, which will be operated on a 24-hour basis until back orders are taken care of, will make new types of yarn, including transparent as well as opaque types, bright and dull, rough and smooth finishes, multi-colored, multistrand. Also planned are fire-retardant and self-extinguishing yarns for auto upholstery and draperies, yarn for furniture webbing, and a line with over 100 colors for handbags.

KINGSPORT, TENN.—Tennessee Eastman Corp. has announced the award of a contract to erect a two-story addition to its administrative office building at Kingsport. The cost of the project is estimated at \$300,000. It is planned to start construction within the next few weeks.

CHARLOTTE, N. C.—With establishment of the North Charlotte Foundation, officials of Highland Park Mfg. Co. have announced plans for a large-scale community welfare and recreational program for the industrial section of Charlotte where many of the mill employees reside. Immediate plans call for the construction of a community center with an auditorium of 2,500 seating capacity.

BAMBERG, S. C.—Santee Textile Mills, with a capital stock of \$100,000, has been organized here. Purchasers were Elias M. Pinto and Lee M. Olivar, who have extensive manufacturing interests in North Africa, and several associates. Mr. Pinto is head of the Tides Products Co., textile exporters, and Adlud Trading Corp., steel and chemical exporters, both New York concerns. Mr. Olivar is Moroccan consul in New York.

GREENSBORO, N. C.—Slater, Carter, Stevens Co., a holding company, has been organized here to bring into a central organization the rayon cloth manufacturing facilities of S. Slater & Sons and Carter Fabrics Corp. J. P. Stevens & Co., Inc., will act as selling agent for the organization. Assets of the new (Continued on Page 52)

Looking to the future  
with a proud past . . .

## Ray Chemical Co.

Charlotte, N. C.



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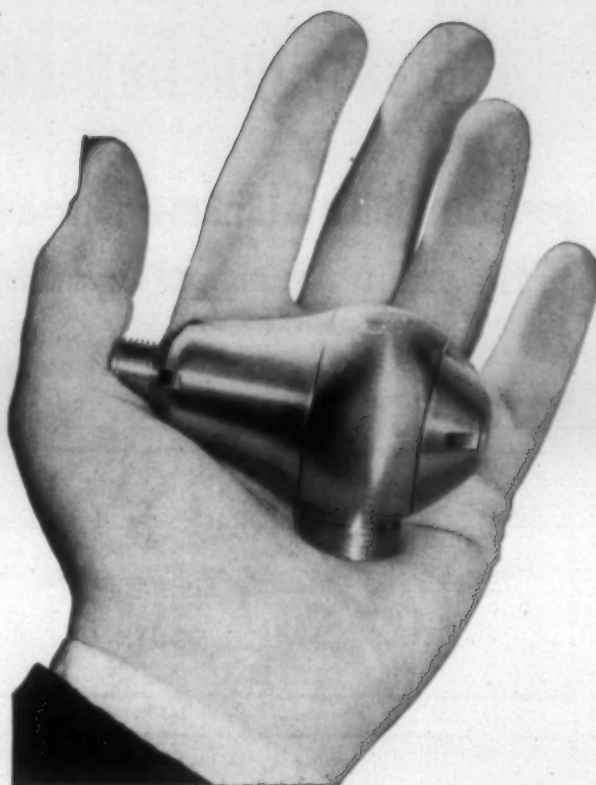
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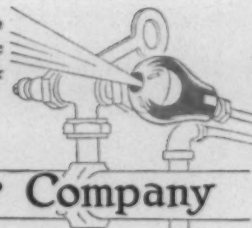
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MILL ENGINEERING—Registered Professional Engineer, formerly with Robert & Co., wants job making mill construction plans; fee or salary basis. Write "Box S-D," care Textile Bulletin.

WANTED—Position as Barber-Colman Spooler and Warper man; 14 years' experience; married, three children. Now employed but wish to make change. Experienced with cotton and rayon both. Good references. Write "B-S," care Textile Bulletin.

WANTED—Classing or buying position with cotton mill or shipper. Age 41, married, 20 years' experience buying and classing cotton. All growths. Now employed by shipper but desire change. "Box 4510," care Textile Bulletin.

WANTED—Position as roller coverer overseer; wife also A-1 roller coverer. 25 years' experience on cork, calf and sheep skin. References exchanged. "Box 323," Rock Hill, S. C.

VETERAN—University graduate with eight years' experience in textiles, desires position or salesman or distributor for textile supply firm. References. Address "University," care Textile Bulletin.

POSITION WANTED—Overseer of spinning with progressive mill; 14 years' experience; A-1 references; 43 years old. Production quality getter at low cost. Available February 1, 1946. Address "P. O. G.," care Textile Bulletin.

OVERSEER OF WEAVING would consider going to South America or would accept weave room anywhere. I am now employed but would like to make a change. Can furnish good recommendation; age 40, sober and reliable. Address "South America," care Textile Bulletin, P. O. Box 1225, Charlotte, N. C.

CARD ROOM SECOND HAND desires work. Eight years' experience as second hand on cotton and rayon and fifteen years as section man on Saco-Lowell machinery. Write "Box I-501," care Textile Bulletin.

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Small sewing room on cotton garments.

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Overseer cotton winding, \$65 week.  
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Manager to take full charge of small Southern cotton mill for Northern owners, salary \$7,000-\$8,000 year.

Superintendent, agent or foreman for manufacturing new burlap and cotton bags.  
Purchasing agent cotton mill in North Carolina.  
Overseer for third shift weaving, lenos and marquisettes; Draper looms; good for \$60-\$80 week.

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By progressive company, overseer 35-42 years of age, for carding and spinning, 17,000 spindles fine combed yarns in Piedmont section of North Carolina. Must have good education with ability and desire for advancement.

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## For the Industry's Use

(Continued from Page 37)

military applications, it is reported, has given full satisfaction. Chemically, the new material is described as a fully substituted quaternary ammonium pentachlorophenate and, in the concentrations used in treating fabrics, it is colorless, odorless and free from toxic tendencies. It is further described as a water-soluble material, a feature designed to make it easy to apply with any type of dyeing machinery. Textile fibers, immersed in a Hyamine 3258 solution, are said to absorb the fungicide from the bath and retain it to the extent that it is not removed by subsequent bleaching action of water.

### Andrew Technical Service Presents New Tumble Jar

An improved hand-driven tumble jar unit, applicable to laboratory tests in connection with textiles, chemicals etc., has been announced by Andrew Technical Service, Chicago, Ill., form-



erly American Technical Co. The unit, comprising a chemical stoneware cylindrical jar, has a six-inch diameter and is eight inches high, with rein-

forced rim, rubber gasket, ceramic cover, metal cover clamp for leakproof closure, and mounted on a sheet metal base with crank to permit rotation by hand, is touted to be equally efficient for tumbling solids, powder, or dissimilar liquids and for mixing, blending, dispersions, emulsions, colloids and solutions.

The unit is said to be especially useful in tests of water-repellent coatings for textiles. The manufacturer states that tests which specify the Tumble Jar are now a part of Quartermaster Corps test methods for fabrics, suitable for inducing certain mechanical action to test swatches, for doing small-scale dry cleaning tests and application on both Type I (aqueous) and Type II (solvent) retreating water-repellent. Overall dimensions are 13½ inches by 13½ inches by 15 inches high. Motorized units also are available.

### 'Ceglin' Finishes Described In Sylvania Booklet

Methods of improving cotton and rayon cloth with a more durable finish, better hand, reduction of shrinkage, increased wear and many other qualities of a superior product are described in a new booklet about "Ceglin," published by Sylvania Industrial Corp. Based upon actual use-tests, the booklet provides a complete description of the new cellulose ether finish, along with ways of applying it with a minimum number of changes in present plant operating procedure.

There are five different types of Ceglin, according to the booklet, each with a different viscosity and each intended to do a different and specific job. All five types may be purchased

either as a dry material or in solution. The booklet contains instructions for achieving various effects and for using either dry or liquid Ceglin, which may be applied to grey, kier boiled or bleached cloth. Free copies of the booklet may be obtained from Sylvania Industrial Corp., 122 East 42nd Street, New York 17, N. Y.

### Ball and Roller Bearing Grease Westinghouse Item

For dependable lubrication from 13° F. to 176° F. for all speeds up to 3,600 rpm and for horizontal or vertical operation, an improved grease for ball and roller bearing



motors is announced by the Westinghouse Electric Corp.

Available in a new eight-ounce nasal type tube, as illustrated, the grease is stable, highly resistant to oxidation, and will remain in a bear-



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ing for an indefinite period without drying out, caking or separating. The new tube is designed for easy and economical use. It has a large opening in the nasal spout which fits into a 1/8-inch pipe coupling, and a key with which to wind and exert pressure from the bottom of the tube.

### 'Alrosol' and 'Definized' Agents Are Promoted

A 12-page technical bulletin on "Alrosol," an Alrose wetting agent and detergent, has been issued by Alrose Chemical Co. of Cranston, R. I. The bulletin is available on request, along with a sample of the product. Among other uses, in the textile industry Alrosol is employed mainly as a scouring agent; in bleaching, as a penetrant and bleaching accelerator with alkaline peroxide or sodium hypochlorite; in stripping vat colors, as an adjuvant in hot hydrosulfite-caustic soda baths to strip vat dyeings. In dyeing, it is recommended especially for use with basic colors and vat dyes and, in sizing and desizing, it may be used

with many desizing agents. While Alrosol itself has rewetting properties, acidified Alrosol has softening properties as well, it is claimed.

"Definized," a new stabilizing finish that is designed to make rayon fabrics fully washable, is announced by Aqua-Sec Corp. of New York City. The process was developed by Alrose. After laundering tests, Definized rayon is reported to have shown good abrasive resistance with no loss of tensile strength or chlorine damage and with minimum shrinkage or stretching distortions. It is further claimed that the Definized procedure has succeeded in reducing dimensional change in rayon fabrics to one per cent or less.

### New Textile Softener Described in Bulletin

A technical bulletin on the use and effect of "Aerotex Softener H," textile finishing compound, has been released by the textile resin department of the American Cyanamid Co. Aerotex Softener H is described as a new and different type of softener for use with wool, cotton or synthetic fibers, also

capable of producing unusually fine results when used in conjunction with resin finishes. Softener H is said to produce a fine, supple hand with excellent draping qualities, with the softening effect not affected by laundering and dry cleaning. The new booklet, *Textile Finishing Bulletin No. 111, Aerotex Softener H*, is available to textile executives and others on request to the textile resin department, American Cyanamid Co., Bound Brook, N. J.

### New Hand Fire Extinguisher Is Developed By Goodrich

A new carbon dioxide hand fire extinguisher with unique design and quick operating features developed B. F. Goodrich Co. Made to meet the during the war is announced by the full approval of fire underwriters, the container holds four pounds of carbon dioxide and comes with a carrying handle and control button designed for fast operation. It can be easily carried in one hand, with the thumb of the carrying hand operating the push button. A horn swivel quickly raises or lowers as needed,



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remaining in lower position when attached to the wall rack furnished with each extinguisher, together with a quick release chain. Painted vivid orange and black for high visibility, the extinguisher may be recharged at regular refill service establishments.

### Durable Chintz Produced With Use of Melamines

The use of melamine formaldehyde resins has made it possible to produce durable, high-gloss glazes on chintz that will withstand even such severe treatment as boiling for half an hour in soapy water, according to a bulletin published by the textile resin department of American Cyanamid Co., Bound Brook, N. J. The glazes, states Cyanamid, are immune to dry cleaning processes and are effective in controlling shrinkage to less than two per cent in length or width.

The bulletin describes the development of the present high quality durable chintzes, including improvements in dyeing. Production steps are described with full details of the best modern methods of producing durable glazes, including preparation of the

cloth, preparation of the finish batch, impregnation of the fabric, drying, pasting and friction calendering. Also discussed are the polymerizing, or curing, of the resins, the neutralization and washing of the cloth, drying, final calendering and inspection and testing. Properties of the various finishing resins and the chemical reactions that take place are described in some detail.

Textile Finishing Bulletin 101, *The Production of Durable Glazes on Chintz*, may be obtained by request to Textile Resin Department, American Cyanamid Co., Bound Brook, N. J.

### Allis-Chalmers Offers New Dielectric Heater

A new standard two-kilowatt dielectric heater, designed for drying and heat treating of textiles, has been announced by Allis-Chalmers Mfg. Co., Milwaukee 1, Wis. Featuring simplicity of control and constructed for continuous duty, the new heater employs proven circuits and methods to achieve the utmost reliability, according to the manufacturer. Frequency can be varied through a wide range by a front panel control and an automatic timer controls heat sequence from

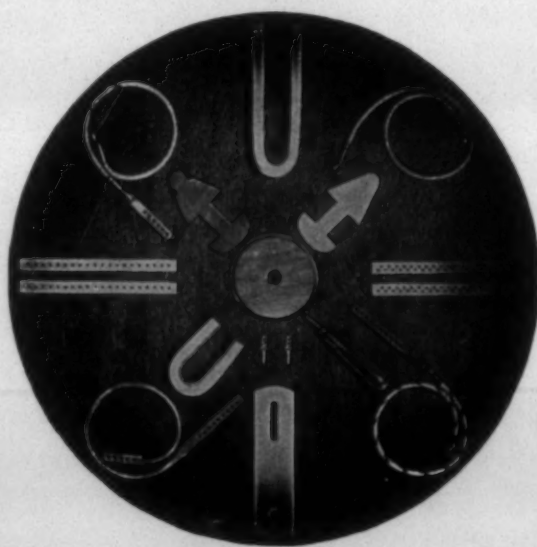
two seconds to 20 minutes as selected. An oven, containing electrodes easily set for any desired application, is completely shielded to eliminate undesirable radio frequency radiation. Filament of a long-life oscillator tube with simplified forced air cooling is protected by a time delay relay. Added protection is provided by an overload plate current relay.

In the Jan. 1 issue of *TEXTILE BULLETIN* a photograph accompanying the item which announced formation of the textile supply firm of Watson & Desmond, Charlotte, was identified incorrectly. Clifton E. Watson should have been listed as seated on the right, and S. P. V. Desmond as seated on the left.

The new organization will represent Emmons Loom Harness Co., Watson-Williams Mfg. Co. and D. P. Brown & Co. in the Southern area, as well as Vermont Spool & Bobbin Co. and Dana S. Courtney Co. in Georgia, Alabama, Mississippi, Louisiana and Texas. Field offices will be operated by John W. Littlefield at Greenville, S. C., and Walter F. Daboll at Greensboro, N. C.

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**R.D. COLE MFG. CO.** ESTABLISHED 1854  
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## Developments in Acetate Rayon

(Continued from Page 32) resistivity as well as mildew resistance, and by the marked technical improvements which have been achieved in color fastness.

Military operations in the South Pacific focused attention on the inherent mildew resistance of acetate rayon. Laboratory tests with the various species of mildew organisms and actual soil-burial tests have repeatedly confirmed that the strength of acetate rayon is not significantly affected under conditions of mildew attack which deteriorate or destroy cellulosic fibers, leather, etc. This property of inherent resistance to mildew deterioration should insure a widening market for civilian fabrics for apparel and household uses in Southern climates which are generally characterized by high temperatures and by high humidities.

Four special types of acetate rayon are worthy of mention in a discussion of wartime uses and peacetime potentialities. One is a saponified acetate rayon characterized by very fine filaments and a combination of very high strength and rather low elongation. This was produced commercially during the war for flare chutes and other purposes for which a very light strength to weight ratio was desirable. The second is a high impact, or high elongation, acetate rayon characterized by normal strength and a breaking elongation about twice that of ordinary acetate rayon. This was produced commercially during the war for aerial delivery chutes. The third special type was a medium tenacity acetate rayon with strength in the neighborhood of 2.5 g/den. This was of interest for tropical insect netting because of the fortunate combination of strength and mildew resistance. The fourth

special type is plasticized acetate staple fiber which is used to make felts and bonded webs of various weights and textures by subjecting a batt composed of a blend of plasticized acetate staple with other plastics or non-plastic fibers to heat and pressure. These special types offer interesting possibilities for the post-war textile industry to use acetate rayon in new ways.

Apart from the ways in which wartime applications of acetate rayon may stimulate designers of fabrics for apparel, household and industrial uses to employ the distinctive properties of acetate rayon in suitable fabrics, an intensive attack on the problem of improving the fastness of dyed acetate rayons has been carried to success during the war years. In addition to the proper choice and application of acetate dyes, the war years have introduced new methods of applying dyes which were not previously used on acetate rayon. One of these involved the practical application of vat dyes to acetate rayon fabrics with resultant fastness to light, to washing at 160° F., and to fumes, comparable to the results obtainable with vat dyes on viscose and cotton.

## New Memberships In Institute Announced

The Cotton-Textile Institute has announced that the following mills have been elected to membership: Seneca Division, Utica and Mohawk Mills, Seneca, S. C.; Charles Bernstein & Sons, Paterson, N. J.; George McArthur & Sons, Baraboo, Wis.; Woolun Mills, Paterson, N. J.; Wayne Mills, Philadelphia, Pa.; Penn Textile Corp., York, Pa.; Horace Linton & Bro., Philadelphia; Pittsfield (N. H.) Weaving Co.



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## Fourteen Bales of Cotton on Five Acres

George H. Blanton of Rutherford County (N. C.) won the North Carolina Five-Acre Cotton Contest with 7,080 pounds of cotton on five acres, grown at a cost of approximately eight cents a pound, and was awarded a total of \$1,100 in prizes.

Average yields on the five acres of the winners by districts was as follows: western district, 6,688 pounds of lint; central district, 4,954 pounds; eastern district, 5,587 pounds.

All contestants kept accurate records on the cost of production and the quality of their cotton in special record books prepared by J. A. Shanklin, who directed the contest. The awards were made by Director I. O. Schaub at a meeting of the North Carolina Ginners Association. The contest was sponsored by a number of business agencies interested in the future of cotton in North Carolina.

Blanton's record book and field checks established the following information: width of row, 36.3 inches; spacing, 3 to 4 plants at 18 inches; total plants per acre, about 30,000; bolls per pound, 63.9; lint percentage, 36.9; and seed, Coker 100, Strain 6. All prize winners grew various strains of Coker cottons.

Blanton turned under a heavy crop of lespedeza on his five acres in the fall and prepared the land in December. He made the seed bed in March and applied 600 pounds of 4-10-6 per acre with a grain drill in April. The crop was planted on May 5, at which time he applied 200 pounds of the 4-10-6. The crop was topdressed with 200 pounds of nitrate of soda per acre, when the plants were about 15 inches high.

He used hill-dropping plates in seeding the crop, never chopped the cotton, hoed it once, and cultivated it four times, twice with a gee-whiz and twice with an 18-inch bow on a bull tongue plow. Seasons were favorable except for two rainy periods, and no boll weevil damage was observed, the bolls maturing to the top of the plants.

Blanton produced his cotton at a remarkably low cost of just a fraction over eight cents a pound. He grew the crop with hired labor and his total expense on the five acres was \$571.01. An itemized statement of his labor expense showed it to be \$382.11; fertilizer costs were \$88.40; and land rent, seed, seed treatment, and ginning amounted to \$188.90.

Final records showed that Blanton cleared \$1,442.82 on the five acres, or an average of \$288.56. He produced cotton for eight cents a pound and sold it for 24 cents.

The contest was sponsored by a number of business agencies interested in the future of cotton in North Carolina.—From *Extension Farm-News*, published by the Agricultural Extension Service of North Carolina State College.

## A.A.T.T. Papers Carried In Magazine

The first edition of the new technological journal, *Papers of the American Association of Textile Technologists*, has been mailed to subscribers. This new magazine contains the various papers read at the regular monthly meetings of the association from September through November, 1945. Nine eminent textile specialists have contributed a symposium on rayon dyeing and articles on shrinkage, the cotton spinning process, inflammability of consumer textiles, etc. The *Papers of the American Association of Textile Technologists* will be issued three or

four times a year. Each edition will contain the technical and scientific papers read at the previous three or four monthly meetings of the association and will provide the only permanent record of these discussions for the entire A.A.T.T. membership.

### Du Pont Announces New Research Plan

A new series of research positions designed to make science as a career as attractive as the administrative field in industry was announced Jan. 4 by the technical division of the E. I. du Pont de Nemours & Co. rayon department. The classifications, another manifestation of the company's effort to enhance the importance of research, will offer new opportunities in salary, responsibility and prerogatives.

The plan, which departs from industry's general policy of recognizing outstanding scientists by promotion to administrative posts in research, provides for three classifications of "research associates." It places greater stress on



Du Pont President W. S. Carpenter, Jr., and B. M. May, general manager of the rayon department, offer congratulations to the first three scientists promoted under the company's new research plan. Left to right: Dr. E. V. Lewis of the nylon research section, Wilmington, Del., who became a junior research associate; Dr. W. E. Roseveare, research supervisor in charge of the basic research group of the viscose rayon research section at the Spruance Plant, Richmond, Va., appointed a research associate; Dr. E. F. Izard of the pioneering research section at the Yerkes Plant, Buffalo, N. Y., also a research associate; Mr. Carpenter and Mr. May.

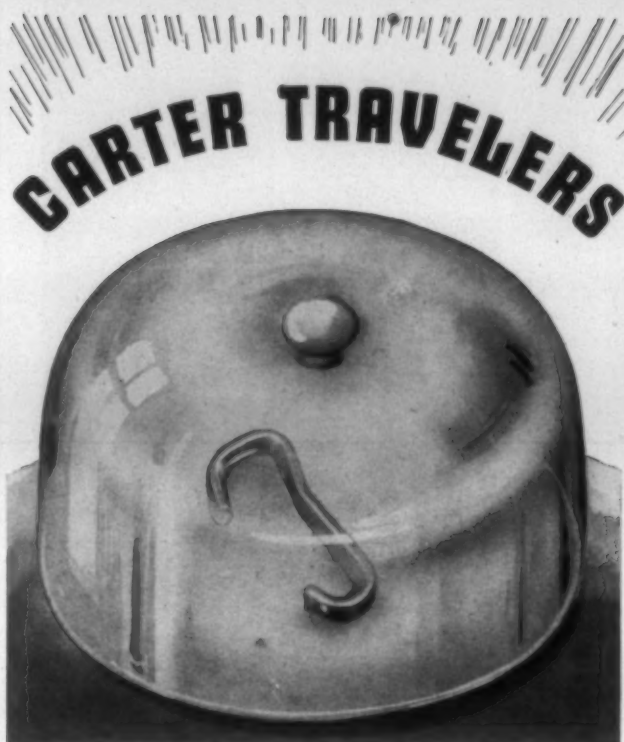
fundamental work by establishing research positions with salary rates corresponding to those for supervisors, managers, and assistant research directors, it was explained by Dr. E. B. Bengier, manager of the technical division.

The new classifications, which are open to chemists, engineers, and other technically-trained employees demonstrating unusual scientific ability, are specified by the titles of "junior research associate," "research associate," and "senior research associate."

### Corn Shortage Curtails Textile Necessities

Three billion bushels of corn harvested in last fall's bumper crop have not warded off a shortage of starch for the textile industry, adhesives and other materials. Recently two plants were forced to shut down as a result of running out of corn. Unless corn moves to market immediately more curtailments will be forced, executives of corn refining companies have said.

The tenth anniversary of Steel Heddle Co. of Canada, Ltd., Montreal, manufacturer of reeds for looms, recently was marked. Five of the employees of the company also celebrated their tenth anniversary with the company, including J. W. Elliott, general manager of the plant. He first was employed in the Philadelphia, Pa., plant of Steel Heddle Mfg. Co.



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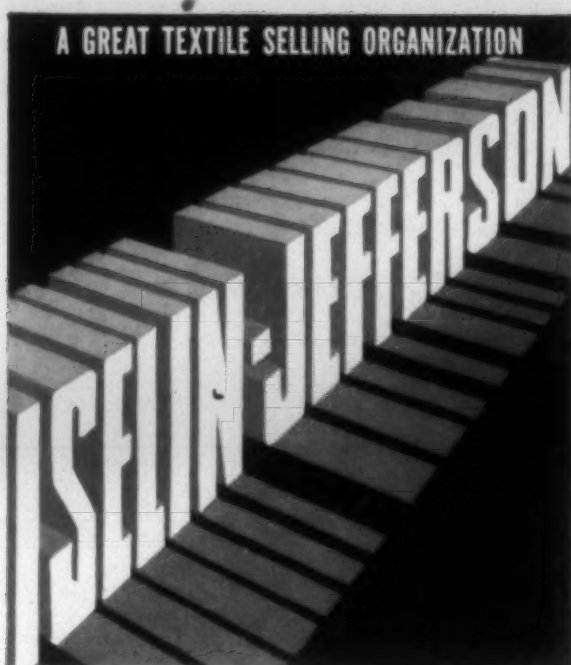
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## H & B Sponsors Industrial Insurance Program

The H & B American Machine Co., manufacturer of cotton textile machinery for the past half century at Pawtucket, R. I., has inaugurated a comprehensive co-operative insurance program. This program not only covers the usual life insurance provisions, but it includes accidental death and dismemberment, weekly sickness and accident benefits, daily hospital benefits, surgical fees, and miscellaneous hospital charges as well.



Mrs. McSwan, beneficiary of H & B American Machine Co. employee, who was fully protected by the company's insurance program upon his death, is shown at the presentation ceremony. Reading from left to right are Mrs. McSwan, N. K. Bennett, engineering department; A. C. Hastings, Jr., treasurer; E. S. Hood, W. D. Warner, W. B. Greenwood, L. N. Adhead, all of the engineering department; E. J. McVey, executive vice-president, and C. E. Burgess, general manufacturing manager.

During the first month of the operation of this program some \$809.99 was paid in claims for weekly sickness benefits and hospitalization benefits. Joseph H. Teeden, who had worked 32 years for H & B American Machine applied for the complete protection offered by this program Oct. 17, 1945. He was then working and had been attending his duties regularly. While at work Oct. 29, however, Mr. Teeden suffered a heart attack and died Dec. 13. During his sickness he received a regular weekly sickness benefit and upon his death his beneficiary, his sister, Mrs. McSwan, was awarded the amount for which he was insured.

The check for the full amount was presented to Mrs. McSwan by W. D. Warner, Mr. Teeden's supervisor, at a simple ceremony attended by Mr. Teeden's close co-workers and H & B American Machine executives.

## Japan Makes First Post-War Silk Delivery

The first raw silk shipment to reach the United States from the Orient since before Pearl Harbor arrived in San Francisco, Calif., early this month. The shipment, more than 600 bales, has since been delivered to silk mills on the eastern seaboard for processing.

This represents the first actual delivery of "the goods," following upon an earlier news release from Tokyo to the effect that Japan's textile industry hopes to convert all its silk production facilities to manufacturing for export, cutting off domestic supplies of shortcut fiber and amassing 157,000 bales of raw silk for foreign buyers by December, 1947. Japanese silk and hosiery industrialists also have agreed to production of approximately 417,600 pairs of



full-fashioned silk hosiery as souvenirs for occupation troops during the first half of 1946.

The United States Congress, in the interest of promoting this country's silk industry, has sponsored the visit of a House agriculture sub-committee to Japan for a three-week survey of Japan's silk industry. The survey committee includes Reps. W. R. Poage, Texas, chairman; H. D. Cooley, North Carolina; J. W. Flannigan, Jr., Virginia; and Ross Rizley, Oklahoma. The trip was planned on the basis of testimony given to the committee by W. J. Roberts, president of the American Silk Corp., Mineral Wells, Tex., and Ernest Mims, secretary of the Mineral Wells Chamber of Commerce.

Both men offered testimony to the effect that the Universal Winding Co.'s cocoon reeling machine was so efficient that it could offer profitable competition to the production of cheap Japanese hand labor. They indicated that if research were undertaken to make the mulberry tree more hardy in the Texas climate, the United States could become self-sufficient in silk. The new cocoon reeler eliminates from ten to 12 operations formerly done by hand, and it permits one operator to equal the output of up to 20 hand laborers, it was stated in committee hearings.

### Goodrich To Build New Research Center

Construction by B. F. Goodrich Co., Akron, Ohio, of a plant to house the company's projected new research center will be started soon on a 260-acre tract approximately halfway between Akron and Cleveland, near Brecksville. Present plans call for five separate air-conditioned buildings built of gray brick. The outstanding feature of the new laboratories will be their adaptability for rapid conversion from one type of work to another. Removable partitions, interchangeable fixtures and a wide variety of special services will be employed. At the beginning of operations in the new research center the staff will consist of between 220 and 250 persons. Dr. Howard E. Fritz, Goodrich's director of research, is supervising the project.

### Indian Textile Executive Inspects Mills

Representing the Delhi Cloth & General Mills, Delhi, India, of which he is managing director, Bharat Ram recently visited and inspected textile and chemical plants in Charlotte and Gastonia. The Indian textilst said that his company, which operates 3,000 looms and 103,000 spindles in textile plants, is making preparations to buy considerable textile equipment in the United States. He confided that "trade in textiles now is good in India and we expect business will be very good for five years or more." His tour of inspection of American industrial plants will occupy three or more months. Ram also said that "if possible, we will take some chemical plants right away from the United States," indicating that these are urgently needed in the operation of the New Delhi and Lyallpur Mills in India.

A quality control testing and research laboratory, equipped and operated by the United States Testing Co., Inc., was opened Jan. 15 at Rube Hoffman Co., Los Angeles, Calif. Necessary tests to ascertain the quality of the material converted by Hoffman California Fabrics, another name for the Rube Hoffman Co., will be maintained. The laboratory will be in charge of Francis P. Brennan.

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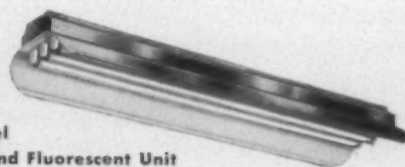
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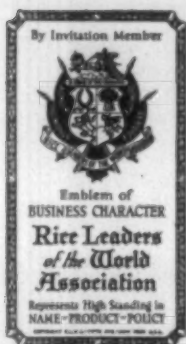
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## Entire Industry Participating in Cotton Fund

The National Cotton Council has announced that all six branches of the cotton industry are now actively participating in its post-war fund to hold and expand cotton markets. Oscar Johnston of Scott, Miss., council president, said the organization had been assured of cottonseed oil mill participation by the signing of contracts with 287 of the 376 active mills in the 17-state cotton producing area. Council figures show that this is 76.3 per cent of all mills in the section, he said.

Contracts with cottonseed crushers will become effective when the National Cottonseed Products Association formally announces that 75 per cent of all active mills have agreed to take part in the council's industry-wide program. Every cottonseed mill in Oklahoma, New Mexico, Illinois and Missouri has signed council contracts. North Carolina crushers follow the 100 per cent states with a 90.6 per cent sign-up, and 90.2 per cent of the mills in Mississippi are participating.

The other five groups of the cotton industry supporting the council are ginner, merchants, producers, spinners, and compress and warehouse operators. They are combining their resources into a program of research, sales promotion, production and export activities designed to increase consumption of the South's foremost crop in the post-war period.

## Southern Textile Mill News

(Continued from Page 40) company are reported to be approximately \$10,000,000. S. Slater & Sons, Inc., operates a plant with 1,248 looms at Slater, N. C., for the manufacture of acetate rayon and spun staple fabrics. Carter Fabrics maintains a rayon weaving plant at Greensboro, with 400 looms 23,000 spindles, and a plant at South Boston, Va., with 500 looms and 11,400 spindles. Other companies associated with Carter Fabrics are Cleveland Cloth Mills, Shelby, N. C., and Stanley (N. C.) Mills, Inc.

LINCOLNTON, N. C.—Controlling interest in Rhodes-Rhine Mfg. Co. has been sold by the Rhodes family to Bernard G. Weill and Stanley A. Rygler of New York City and H. S. McIntyre of Charlotte and Anniston, Ala. The Rhodes-Rhine mill has 7,600 spindles and 164 looms. The new owners already have assumed management of the interests and will continue production along the same line as the former owners. Mr. Weill is president and Mr. Rygler secretary-treasurer of Aristex Corp., New York City, and Mr. McIntyre vice-president. Mr. McIntyre also owns the Amber Textile Mills, Anniston.

HICKORY, N. C.—Hickory Fabrics, Inc., cloth weaving mill, recently was sold to a group of Hickory furniture manufacturers who plan to add a third shift to the plant operation. C. H. Keith is president of the new company and E. M. Suggs, vice-president. George E. Bisanar of Hickory and J. L. Snyder of Charlotte formerly were president and vice-president, respectively, of the company.

GASTONIA, N. C.—Airline Products Co. of Gastonia has purchased the entire equipment and machinery of the balling department of Textile Yarn Products Co. of Lincolnton, N. C. The acquisition will approximately double the capacity and output of Airline, making it one of the largest pro-

ducers in the South of ball wrapping twine, ball crochet twine and ball gift twine.

GASTONIA, N. C.—Irene Mills, Inc., of Gastonia has received a charter of incorporation to operate cotton mills, including Irene Mills of Taylorsville, N. C. Capital stock of \$400,000 was authorized and \$3,000 was subscribed by Robert J. Gurney, C. C. Armstrong and G. A. Cooper, all of Gastonia.

GREENVILLE, S. C.—Greenville Textile Co., with a capital of \$60,000, has been chartered. Universal Fabrics, Inc., also of Greenville, has been chartered to manufacture, buy and sell textile fabrics. H. G. Hudson is president and treasurer and E. C. Laye, vice-president and secretary.

GASTONIA, N. C.—Baker Mills, Inc., has received a certificate of incorporation to engage in the manufacturing business, with authorized capital stock of \$50,000 and subscribed stock of \$400 by S. O. Friedman, Robert L. Etchier, Hal Baker and Jules Witten, all of Gastonia.

STONEVILLE, N. C.—Eanes Mfg. Co. has been issued a certificate of incorporation to deal generally in textile products here. Authorized capital stock is \$100,000 and subscribed stock \$300. Incorporators are Harold C. Eanes, Mrs. Harold C. Eanes, both of Greensboro, and Archie L. Smith of Asheboro, N. C.

#### Taber Re-elected To Head A.A.T.T.

Carl I. Taber of the acetate division of E. I. du Pont de Nemours & Co. was re-elected president of the American Association of Textile Technologists at a meeting of that organization Jan. 9. Ephraim Freedman, head of the bureau of standards of R. H. Macy & Co., was re-elected first vice-president, and Dr. George E. Linton was re-elected second vice-president. Also re-elected to their respective offices were Ralph M. Gutekunst of Hellwig Dyeing Corp., treasurer, and Bernice S. Bronner, secretary.

Lewis Carpenter was elected for the first time to the board of governors to serve for a term of three years. John Goldsmith of Hess, Goldsmith & Co. and Joseph C. Hirsch of Cyril Johnson Woolen Co. were re-elected governors. Walter Bollier, Phoenix Silk Corp., George Jolly, Unique Fibers, Inc., and Fred Kern of F. P. Maupai Dyeing Co. were elected auditors for the year.

The diamond jubilee anniversary of the New Orleans Cotton Exchange occurs this month. A number of the 18 men who founded the exchange in 1871 were Civil War veterans and repetitious history has brought it about that many of the present-day members of the exchange are just out of the uniforms of World War II. Then, the members' cotton markets were uncertain as a result of war and their sources of information on cotton supplies and demands about the world often were unreliable. Now, the exchange is endeavoring to account for its more than 300 war-scattered accredited correspondents. The rented room which first housed the exchange is now a seven-story, \$1,222,520 building. The first president of the exchange was E. H. Summers and his superintendent, the late Henry G. Hester, who made his own name and that of the exchange famous in world cotton circles.

To Exhibitors and Non-Exhibitors Alike—

## TEXTILE BULLETIN'S 35th Anniversary and Southern Textile Exposition Number (MARCH 15th ISSUE)

affords a most effective opportunity to reach the major officials of ALL Spinning and Weaving mills in the South, and the plants that dye and finish the products of these mills, with an advertising message featuring new machinery and equipment that is now, or that will soon be available.

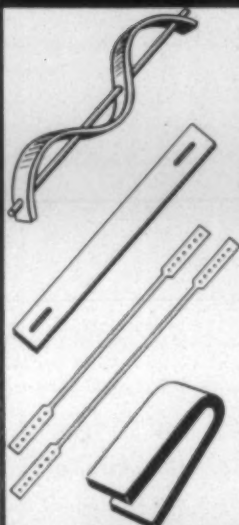
- Fine editorial support consisting of a comprehensive preview of the Greenville Show and feature articles dealing with new and improved wartime developments in textile manufacturing and processing.
- Extra circulation, including hundreds of copies that will be distributed at the Exposition.
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## S. T. A. South Carolina Division Discussion

(Continued from Page 20) per cent more cleaning was obtained with the new drive than with the old. On the belt shifting, from the low to the high, it shifted six times with the new drive, and with the old drive eight. So we think we have a definite improvement by installing these drives.

MR. CAUGHMAN: What about the wear on those beveled gears on the side. Have you had opportunity to observe the wear on those?

MR. AULTMAN: We have had them about a year now, and I have not observed any wear on those beveled gears. I think it would decrease the wear, because it is a smooth drive and not stopping and starting. That is one of the reasons it was brought out, and the other was to get a more uniform lap drive.

CHAIRMAN TEMPLETON: We will pass on to the second question: "Is the use of what is known as the 'paper tube type spindle' satisfactory? How does bolster wear compare with other types of spindles?"

### The Paper Tube Spindle

W. C. BLAKENEY, assistant superintendent, Spartan Mills, Spartanburg, S. C.: We have been running the paper tubes a little over four years. We found on an average of 288 spindles we took out two belts. After three years we overhauled the frames again and found we had an average of ten belts per frame. Our spinner is not here, but I think some of that was due to the oiling we did. If we were short of help we took the oilers off and had them do doffing or something else. But the paper tube will eliminate the shaking of bobbins. As to the wear, it is due to the handling. In other words, if you mistreat them you ruin the tubes. They will not stand cutting with a knife or being run over with a truck. But so far as ordinary wear is concerned, we find they are satisfactory. We did run into some trouble with the tubes being dropped into the automatic spooler. The tubes have a very thin brass ferrule on the edge, and dropping them into the automatic spooler bent that. We remedied that by putting a very thin piece of leather in there.

CHAIRMAN TEMPLETON: Did their use eliminate shaking of the spindles?

MR. BLAKENEY: Yes.

CHAIRMAN TEMPLETON: Have you made any power tests on these, versus the conventional type of spindle?

MR. CAUGHMAN: Mr. Templeton, let me answer that for you. We did run tests before and after, and there was a very slight power saving with the paper tube, but we did not feel that that was due exactly to the different type of tube there. That was a plain against a ball bearing. We hope to have the results of the paper tube with the ball bearing against the paper tube, plain, maybe by our next meeting, and we feel that then we can answer the question as to power consumption.

QUESTION: How do you clean these tubes?

MR. BLAKENEY: With regular cleaning. We find the tube with the ferrule at top and bottom is more satisfactory. Some doffers, I find, when putting on the tubes have the habit of tapping them a little bit. Of course, in the course of time that will make the top rough. But you can run them with the top rough if it is not broken down.

MR. C.: I should like to ask this question. Under the same operating conditions, do you think you can run with

fewer ends down with the paper tube than with the regular bobbin?

MR. BLAKENEY: Yes.

CHAIRMAN TEMPLETON: Do you find you can run with less twist, due to a more constantly running spindle?

MR. BLAKENEY: Yes, sir.

CHAIRMAN TEMPLETON: You do have improved yarn?

MR. BLAKENEY: Yes, sir.

QUESTION: Do you have to have a greater supply of paper tubes on hand than you did bobbins?

MR. BLAKENEY: No.

CHAIRMAN TEMPLETON: I should like to ask Mr. Shealy of Pacific Mills to give us his experience.

H. A. SHEALY, superintendent, Olympia Plant, Pacific Mills, Columbia, S. C.: We have converted to paper tubes. In the beginning we did not like them for one reason, and that was the doffers. Our men had gotten in the habit of hitting an extra lick as they changed the wood bobbins, and we had quite a time. If you hit the paper tube an extra lick you have something on there that you have to get off with a screw driver. But after we got our doffers trained we liked it better. We have just finished an overhauling job, and we had about one per cent replacement on bolsters. It is about a year between overhauls.

So far as shaky bobbins are concerned, you don't have them. Another thing I like with the paper tube is that the fit is at the top and not at the bottom, which also accounts for the lack of vibration at the top. The paper-tube people are working very closely with us, and they have developed a plastic-top tube which has a ferrule on the top and on the bottom. The original paper tube did not have that. It had two points of contact, which made it difficult for the doffer. Then they came out with the crimped top, which helped. The plastic top keeps the paper tube from wearing too much on the top. Of course, if the paper breaks loose and extends out it strikes your ends, and you have ends down. But with the plastic on top that is eliminated, and you get more life out of your paper tubes. We have been running them seven years, and I like them very much.

#### Experience Is Important

HARALD AMRHEIN, American Paper Tube Co., Woonsocket, R. I.: About the only thing I can say is that nobody can buy a paper tube and just put them in the mill and expect them to run. Everybody that has tried that has had a lot of trouble. The education of the doffer is the most important element. If the doffers learn that this is a different breed of cattle and that they cannot handle the paper tube and use it as they did the wooden bobbin they will get along all right. Once they learn that their troubles are all over.

The American Viscose Corp. rayon producing plant at Marcus Hook, Pa., is to be modernized by the installation of new equipment and the refitting of existing equipment, under an expansion program which will be carried out as rapidly as possible, the company has announced. The plant, which produces viscose rayon yarn, was the first rayon plant to be built in the United States, having started operations in 1911.

The principal parts of the current program will be the refitting and modernizing of existing spinning machines and the purchase of a number of new spinning machines.

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If a high reading cannot be corrected by adjusting the position of the weight, it is advisable to send the head of the tester to the manufacturer for recalibration.

Usually any error found in calibrating is a low reading, generally caused by undue friction within the head mechanism. First check the bearings holding the head shaft. These are lubricated with a special grease, in which dirt and lint may accumulate after years of service. To clean, remove bearings from the head and wash carefully in gasoline or commercial solvent. After washing, cup the bearing in the palm of the left hand so that the inner race does not rub against the skin; place the right thumb against the inner race with moderate pressure, revolving it slowly. Any particles of rust or foreign matter can thus be felt. To produce a good calibration, the bearings must be entirely clean of any material that would impair free rotation.

After cleaning, lubricate the bearing with a very small amount of white vaseline. Never use gear lubricants or machine oil, which tend to oxidize upon exposure.

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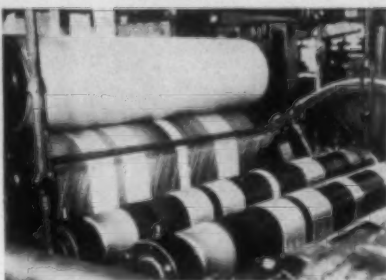
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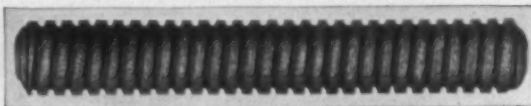
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## Cotton Spinning and Its Adaptability

(Continued from Page 18) frames. The use of condensers between rolls is standard practice today as they greatly reduce roll laps, clearer waste and fly. Flyers pick up more cat-tails on rayon than cotton, and at times this is quite troublesome. Plating is often resorted to, but a coat of tough, thin lacquer is even more effective. It may be worn off the outside in doffing, but the vital part of the flyer, where the stock runs, is not affected. Enamel or lacquer will produce a flowed-over surface, and cover the microscopic roughness that cause this trouble better than plating.

The spinning of synthetics, with the proper drafting equipment, should be even cheaper than cotton. Spindle speeds are lower due to lower twist; and, usually, ring sizes can be larger, due to lower traveler speeds. This results in lower costs in doffing and winding. Drafts can be higher as the greater uniformity of the fibers makes drafting less critical. Longer drafts create more fly and waste unless condensers are used.

A few comments might be helpful to those changing from cotton to synthetics. Don't make an easy task hard. It really is not too difficult except for blending. While many mills have greatly improved their blending by going back to two-process picking; the extra beating does the stock no good. Every beating adds neps. A perfect system of blending and one-process picking to form a good sheet is the ideal way to prepare a lap for the card. Roll laps and clearer waste can be largely overcome by the use of suitable condensers. Static is a problem that should and will be solved by the rayon producer; but in case it is troublesome, an adequate control of temperature and humidity is most necessary.

### Staple Length

If we could find out what range of staple length is absolutely necessary we could make better drafting elements. The greater the range, the more compromise we must make; and the ultimate in efficiency cannot allow very much compromise. It is generally believed that the longer we go in staple length the greater the cost and less efficiency in spinning. Going from  $2\frac{1}{2}$  to three inches in staple usually results in more lap-ups and clearer troubles, and in most cases does not give enough increase in strength to justify the change. Very little, if any, three-inch staple is used on the cotton system except experimentally. If we could freeze our synthetic staple length to  $2\frac{1}{2}$  inches it would make the design of our drafting elements much better. In addition, there would be less trouble with bunches in the yarn when roving is creeled. A mill properly equipped, with help trained to the new fibers, should spin yarn from synthetics on the cotton system with larger packages, lower spindle speeds and higher roller speeds with a consequent saving in labor and power.

### Wool On The Cotton System

Today there seems to be a greater interest shown in spinning yarn from wool tops on the cotton system on the part of our many visitors than anything we have to show them. Tops of the finer grades of wool, not over four inches in length, have been spun into acceptable yarns, putting the top first through two drawing processes, then one or two roving processes and then spinning into yarn. Except for



the long-range variations in the average top, good, even yarns can be spun with only one process of roving.

We asked the superintendent of spinning at a very old and well known worsted mill if he considered the yarn produced on this system fully up to the standard of yarns ordinarily produced from the top he furnished. He said, "I will tell you what I told our president when he asked the same question. I told him if he asked me to spin a better yarn on either the French or Bradford system I could not do it." The particular sample may or may not be representative of what would normally be produced. It was spun using only two processes of drawing and one process of roving. If yarns of standard quality are to be produced on such a very short process, more attention will have to be given to the manufacture of level tops than is now the custom. We cannot eliminate the doublings of the worsted systems, and reduce the size variations in the yarn to worsted standards without a very even top. We found that when we reduced the number of processes on cotton we had to go back and improve our card and drawing slivers. This will be equally true if we process tops. The roving and spinning process presents no unusual difficulty when the proper long or controlled draft mechanisms are used. It is probable that the roving tenders and spinners in time can operate as many spindles as they do on cotton or synthetics.

Thus, the advantage of one operative tending a large number of spindles—which gives the cotton system such a low cost of production—will be realized in the spinning of worsted yarns on cotton frames. On cotton drawing the picture changes. Here, static on some tops makes the usual work-load out of the question. As wool will not compress like cotton or synthetics, due to its natural resilience, the weight in the sliver can will be much less and frames will require more frequent doffing with consequent reduction of the number of machines per operative. Work is being done to reduce the static and produce a larger and less troublesome package. Static will, no doubt, be largely eliminated, either by chemical treatment, as an ounce of prevention is worth a pound of cure, or by the application of radioactive material at critical places.

It is almost uncanny to see sliver so charged with static that the electroscope leaves fly apart if brought near it, completely freed of static if the radioactive strip is passed down the sliver about one-half inch away. Before the radioactive strip is used, the sliver will pull over and stick to any metal part of the frame if brought to within six or eight inches of it. It sticks to the side of the can as if it were glued. However, after passing the sliver near the strip, it is as dead as a door nail and the electroscope shows no indication of static. We have been able to run wool tops which ordinarily would have more than the usual amount of static present without the usual high temperature and humidity. These experiments are just started, and a lot of work and time must be spent before this is ready for use. I have recently seen a top that even this treatment was not sufficient to eliminate trouble. I am of the opinion that the best solution is treatment of the top before drawing.

Wool does not draft as easily as cotton or synthetics, and the conventional drawing frame with rolls set over the longest fibers is not too good a drafting element. We are experimenting with a far more effective drafting device that is as simple and as foolproof as conventional drawing, and which gives much promise though it is not yet ready for release. On this drafting element, with conventional

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cotton drafts or higher, we produce a sliver that gives as good a chart on the sliver tester as cotton. When the problem of the drawing frames are solved, the spinning of tops on the cotton system will be ready; and will, I believe, produce an acceptable worsted yarn at a considerable reduction in cost over present methods. Unfortunately, this has come at a time when all textile machine shops are swamped with orders for conventional machines that they are already tooled up to manufacture; since wool constitutes only about nine per cent of the fibers spun, and cotton and rayon take up over 90 per cent of our spindles, it is natural that the development will be somewhat slower than it would be when shops were eager for business.

The machines on which this experimenting has been done were designed to handle fibers of from one to  $3\frac{1}{2}$  inches. While it is true that longer wool than synthetic fibers can be handled on the widest settings, the difference is not great and the lengths handled so far are not over four inches. If and when we find that spinning wool on such a system is practical and profitable, then drafting elements will be produced to take a range of staple of from two or  $2\frac{1}{2}$  inches to six or seven inches. No new principles are involved, merely a change in dimensions.

Some very attractive yarns have been made from the shorter wools by using double carding on the cotton system. While lacking the parallelization of the fibers obtained from the combed top, the yarns appear to be of such character taken with their low cost that they should be of real commercial value. As is usual with double carded yarns, they have very little of the long-range size variation that requires so much doubling and drafting to overcome.

While we cotton machinery builders have had all sorts of accusations brought against us by our customers and good friends, I think the woolen machinery builders are in worse condition, and out of all this we hope we both will be driven to renewed efforts so that our customers whose part is to clothe the world can produce for their customers better and cheaper fabrics. After all, working together, we have a grave responsibility. We must furnish mankind's second basic need, clothing and protection from the elements.

### Canadian Silk and Rayon Weavers Organize

Organization of the Silk & Rayon Manufacturers Association by 13 rayon weavers in Quebec, Canada, has been perfected and headquarters of the group will be located in Montreal. Purposes of the association will be to foster an interchange of progressive ideas on the problem of transition from war to peace and to explore fully foreign markets for rayon piece goods. Heading the organization is J. L. Hodges, president of British-American Silk Mills, Ltd., and A. Wesley Mason, president of Laurentian Silk Mills, Ltd., president and vice-president respectively of the association.

### Solvay Opens New Laboratory

Solvay Process Co. recently completed a new industrial chemicals research laboratory at Hopewell, Va., and will shortly begin construction of a new research laboratory at Syracuse, N. Y. Dr. C. K. Lawrence will be director of the new laboratory, the opening of which will centralize the company's nitrogen division development department work in Hopewell and involve the transfer of a number of re-

search chemists from the Solvay plant in Syracuse. The purpose of the new laboratory will be the development of new products and new product applications and to improvement of existing products and processes of the company.

The projected Solvay laboratory at Syracuse will house the research organization of the alkali division of Solvay. The laboratory will be located within the present plant site at Syracuse, where caustic soda, soda ash, chlorine, sodium nitrate and other chemicals are made. Solvay products are distributed by Solvay Sales Corp.

### Employee Discipline Survey Is Made

Only one company out of five has a formal code of rules and regulations governing employee conduct on the job, and even fewer have any systematic procedure for dealing with infractions, according to findings in a survey conducted recently by the Labor Relations Institute. A report entitled *How to Improve Employee Discipline* subsequently was published by the institute. Seven basic steps to be taken to insure permanent and equitable "tightening up" of discipline are herein advanced. This is supplemented by a check-chart on infractions, names 38 separate violations, classifying each according to degree and gives the discipline. The union angle and the relation of discipline to collective bargaining are also covered in the report.

### Revised Cellulose Acetate Booklet Issued

A revised edition of the technical reference booklet on cellulose acetate has been issued by Hercules Powder Co. of Wilmington, Del., bringing up-to-date the fundamental literature on the three major bases for cellulose plastics. Revisions on the ethyl cellulose and nitrocellulose booklets were issued several months ago and are still available. Included in the revised booklet on cellulose acetate is a new section on its use in thermoplastic laminates. The booklet also suggests many new uses of Hercules acetate in rayon, film and foil and specialty lacquers. The text is amplified by extensive data in tables and figures, including information on properties of cellulose acetate.

### First Aid Workers Get Standing Orders

First aid workers in industry now have available to them a guide for emergency treatment of injured persons in a booklet, *Standing Orders for First Aid Workers in Industry*. While it was prepared by American Mutual Liability Insurance Co. for its industrial policyholders, copies are available to others as long as the supply lasts. The book covers the recognition and proper emergency treatment of a wide variety of industrial injuries. Considerable space is devoted to discussion of supplies, records, physical arrangements of first aid rooms, transportation of injured persons, and emergency procedures in industry.

Pension and profit sharing plans for the benefit of its employees have been adopted by Stein, Hall & Co., Inc., of New York City, marking its 80th anniversary this year. The entire cost of the plans will be borne by the company. Administration of the plans will be in charge of an employee's committee.



*Headquarters for every type Bobbin*

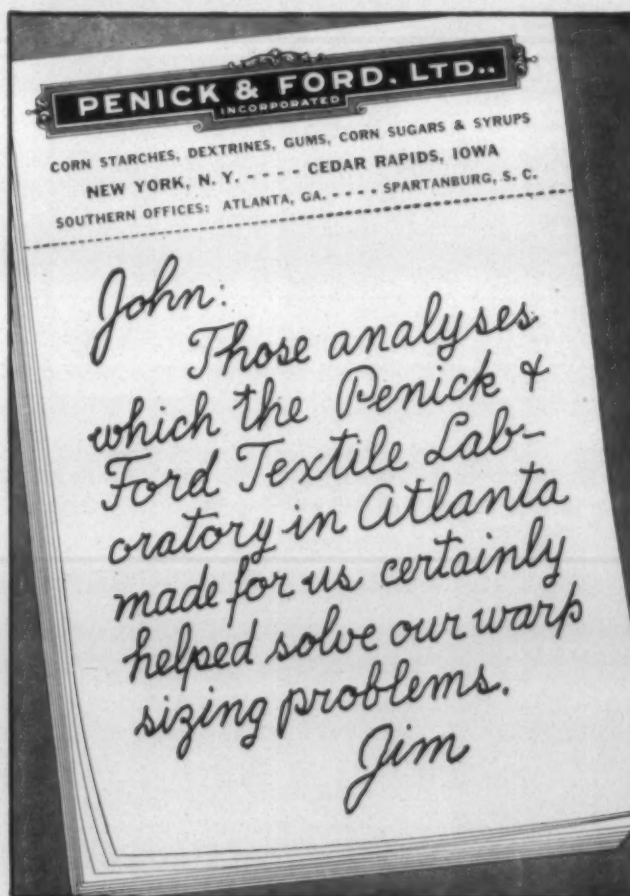
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## American Cyanamid Has New Softener

What is described as a highly versatile textile softener has been announced by the textile resin department of American Cyanamid Co., Bound Brook, N. J. "Aerotex Softener H," as it is named, is said to make possible almost complete control over the smoothness and suppleness of hand of all types of fabrics regardless of what other chemical treatment they may receive.

The new softener is said to be as efficient on rayons as on cottons and wools, and well adapted for use with all types of blends, including mixtures of wool and rayon. In contrast to earlier chemical finishes of this type, it is said to offer exceptional resistance to washing and dry cleaning and does not discolor or develop odor.

According to American Cyanamid, Aerotex Softener H is superior to most synthetic softeners since it has less tendency to affect lightfastness properties of direct and developed colors, nor does it have any tendency to discolor white goods. Use of Aerotex Softener H is said to make possible the elimination of other wetting agents since it has proved to be an excellent wetting agent itself. The finish also has value when used in a resin impregnation bath to reduce the bleeding of certain dyestuffs during impregnation.

The new softener is a synthetic particularly designed for use with the new resin finishing processes. It does not affect finishes designed for shrinkage, stretching and crease proofing control. Composed of colloidal components blended on the alkaline side, it is designed especially for dispersion in warm water by ordinary stirring.

This finish is the latest of a series of improvements for textiles developed by the research laboratories of the textile resin department of the American Cyanamid Co. Best known of the series is Lanaset resin for wool shrinkage control.

## Calco Builds At Willow Island, W. Va.

Construction of production and service units of the new Willow Island, W. Va., plant of the Calco Chemical Division of American Cyanamid Co., Bound Brook, N. J., is reported as being well advanced, with overall plans for the project calling for the initial manufacturing buildings, warehouse and steam plant. Construction cost will be approximately \$3,000,000. Situated on the Ohio River, 16 miles north of Parkersburg, W. Va., the plant property has a river frontage of over 7,000 feet, besides many other natural advantages. Two Ranney collector-type wells having an estimated capacity of 4,000,000 gallons of water per day each are being installed on the 1,000-acre site. The new plant will enable Calco to broaden its activities through the introduction of new products developed by American Cyanamid, as well as those of Calco. It also is intended to relocate at the Willow Island plant the present inorganic pigment department now located at Newark, N. J. Don H. W. Felch has been appointed manager of the new plant.

## Method of Handling Cellulose Developed

Substituting an oxidizing agent for heat, Sylvania Industrial Corp. has developed an improved method of making cellulose suitable for textile finishing. In the past, heat

has never been completely satisfactory because of the difficulty of controlling the exact amount of it that is required, and as a result, local overheating created non-uniformities in the finished product.

A patent on the new process has been issued to the company in the name of Dr. Ralph T. K. Cornwell, director of research. According to it, the cellulose is treated with an oxidizing agent for sufficient time to increase its solubility in aqueous alkaline solutions. The patent also covers the fact that in the research on this new method Dr. Cornwell discovered that waste regenerated cellulose material is a preferred material to use in making this finishing agent. Because of the inexpensive raw materials required and the ease of controlling the manufacturing process, the new product is expected to have a large potential use in post-war developments in the textile finishing field, states the company. In addition, present indications are that it will also be widely used as a pigment binder in the printing and pad dyeing of textiles.

### Industrial Rayon Expands Engineering Work

Industrial Rayon Corp., Cleveland, Ohio, has transferred its executive offices from the company's general office building near the main plant to new downtown quarters at 660 Union Commerce Bldg., Cleveland. This move was made in order to provide additional space for the company's engineering and mechanical development staffs. These divisions have been substantially augmented to handle the planning of a new plant which the company has announced and for special work as a result of the sale of patent rights to its continuous process in foreign countries.

The acquisition of rights in Great Britain, its dominions and countries of Continental Europe by Courtaulds, Ltd. of London, England, was recently reported and was the first step in the program of broadening the use of this process. Industrial will render service for a period of years in connection with the erection and operation of plants abroad where this method of viscose rayon production is to be utilized.

Hiram S. Rivitz, president, and Hayden B. Kline, vice-president, will divide their time between the new downtown office and the Cleveland plant. Treasury, accounting, sales order and payroll department activities will all be centered at the new offices.

Stein, Hall & Co., Inc. has announced a new product, "Syntrag," a thickener for screen printing of Indigosol, Rapidogen, direct, acid, basic and acetate dyestuffs. Syntrag can also be used for white pigment discharge printing in conjunction with albumen and synthetic resin binders. For many types of printing, particularly where unusually soft hand is required, it has been customary to use a solution of gum tragacanth as a thickener. Offered as a replacement for this gum tragacanth solution, Syntrag is said to give equal if not superior results, and at a saving.

Syntrag can be employed wherever a gum thickener is used, but is not recommended for chrome or vat colors. It is especially recommended for printing rayons, spun rayons, acetates and other fine fabrics. Advantages claimed include color yield and brightness equal to that of starch and superior to natural gums, excellent rinsibility, and penetration which eliminates the possibility of the mottled effect which usually results from uneven penetration.

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## Cotton Goods Market

Leading duck producers are expressing surprise at the tremendous demand being made upon them for duck fabrics of various kinds, it is reported in the New York gray goods market. Some of them had been frankly apprehensive over the manner in which some of these goods would be absorbed this year, one Worth Street merchant points out, but so great is the demand that some mills could very easily dispose of their entire year's output immediately if they were so inclined, which, of course, they are not.

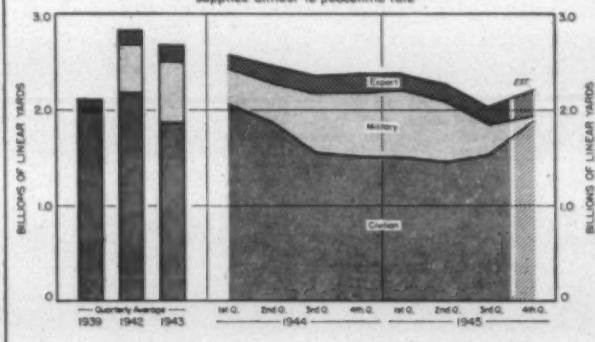
Most houses are selling ducks through the first quarter, with two houses reporting they have the second period under consideration, though no contracting has been done beyond March as yet. A good deal of interest in Worth Street is directed toward the huge government surpluses, and some irritation has been expressed at the lack of information on the second quantity of surplus Army duck which Washington announced some time ago would be sold. All

J. D. Small, Civilian Production Administration chief, posed of have been unavailing.

efforts to learn further when these goods would be dis-  
stated at a press conference that there is no prospect in the near future that production of textile products will catch up with demand.

#### MORE COTTON GOODS FOR CIVILIANS

Drop in military takings restores civilian supplies almost to peacetime rate



Present indications are, he said in his December report, that cotton broad woven fabric production in the fourth quarter will be more than eight per cent below the forecast of 2,343,000,000 yards. During the preceding quarter only 2,013,000,000 yards was produced, compared with 2,231,000,000 yards estimated at the beginning of the quarter. Estimated production for 1946 is about nine billion yards. Potential free demand, domestic plus export, estimated on the basis of the expected general level of economic activity, is between 12 to 14 billion yards.

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Figures released this month by the Bureau of the Census show that the cotton spinning spindle activity of 6,835 million spindle hours in the third quarter of 1945 is a decrease of seven per cent from the 7,338 million spindle hours operated during the second quarter of 1945. As of Sept. 29, 1945, a total of 6,050,398 spinning spindles were reported in place, of which 95 per cent were active on the first shift, 82 per cent on the second shift and 38 per cent on the third shift.

Carded cotton sale yarn production of 144 million pounds in the third quarter of 1945 is nine per cent lower than in the second quarter of 1945 and seven per cent lower than in the third quarter of 1944. Production of plied carded weaving yarns other than two-ply in the third quarter of 1945 amounting to 36 million pounds is 27 per cent lower than the second quarter of 1945 production. The total production of 48 million pounds of combed cotton sale yarn in the third quarter of 1945 is a decrease of 15 per cent from the second quarter.

Proposed price ceilings on raw cotton would completely disrupt the entire cotton marketing system, "with consequent injury to every branch of the raw cotton industry," Oscar Johnston, president of the National Cotton Council, has declared in voicing the council's complete opposition to the ceilings. He said that the council viewed with absolute disfavor the abandonment of the present cotton price stabilization program merely because "the price of cotton has advanced slightly above parity for a short period of time." He added that the stabilization program had worked perfectly for the past 31½ years, and contended that the present system is the only sound means of stabilizing the price of cotton.

BILLIONS OF LINEAR YARDS

# SOUTHERN SOURCES OF SUPPLY

## FOR EQUIPMENT, PARTS, MATERIAL, SERVICE

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information, service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

**ABINGTON TEXTILE MACHINERY WORKS**, Abington, Mass. Offices at Boston, Mass., and Charlotte, N. C.

**ACME MACHINE & TOOL CO.**, 2516 Wilkinson Blvd., Charlotte, N. C.

**ACME STEEL CO.**, 2838 Archer Ave., Chicago, Ill. Sou. Office and warehouse, 603 Stewart Ave., S. W., Atlanta, Ga.; F. H. Webb, Dist. Mgr. Sou. Sales Reps.: C. A. Carrill, 823 Clairmont Ave., Decatur, Ga.; Phone 6267; Marcus M. Brown, 1231 Lexington Ave. (Phone 8583), Charlotte, N. C.; William G. Polley, 937 Cherokee Lane, Signal Mountain, Tenn.; Phone Chattanooga 8-2635; John C. Brill, 309 Magazine St., New Orleans, La.; Phone Magnolia 8459. Warehouses at Atlanta, Ga.; Greenville, S. C.; New Orleans, La.

**AKRON BELTING CO., THE**, Akron, O. Sou. Reps.: Ralph Gossett and Wm. J. Moore, 15 Augusta St., Greenville, S. C.; The Akron Belting Co., 406 S. 2nd St., Memphis, Tenn.

**ALLADDIN LABORATORIES, INC.**, 68 William St., New York 5, N. Y. Sou. Repr.: J. W. Baldwin, 124 E. Third St., Charlotte, N. C. Phone 3-2252.

**ALLEN CO., THE**, 440 River Road, New Bedford, Mass. Sou. Repr.: L. E. Wooten, Fort Mill, S. C.

**AMERICAN BLOWER CORP.**, P. O. Box 58, Roosevelt Park Annex, Detroit, Mich.; 7 N. 6th St., Richmond, Va.; 1211 Commercial Bank Bldg., Charlotte, N. C.; Room 714, 101 Marietta St. Bldg., Atlanta, Ga.; Room 309, Jahnnke Bldg., 818 Howard Ave., New Orleans, La.; 619 Texas Bank Bldg., Dallas, Tex.; 312 Keller Bldg., Houston, Tex.

**AMERICAN CYANAMID & CHEMICAL CORP.**, 30 Rockefeller Plaza, New York City. Sou. Office and Warehouse, Wilkinson Blvd., Charlotte, N. C.; Hugh Puckett, Sou. Sales Mgr. Reps.: John D. Hunter, E. H. Driver, Paul F. Had-dock, Charlotte Office; E. J. Adams, 1404 S. 22nd St., Birmingham, Ala.; Jack B. Buton, 610 N. Mendenhall St., Greensboro, N. C.; O. B. Suttle, Jr., 423 Clairmont Ave., Decatur, Ga.; K. E. Youngchild, 10 South St., Mobile, Ala. **AMERICAN CYANAMID CO.**, Textile Resin Dept., Bound Brook, N. J. Sou. Reps.: J. E. Moore, Mgr., Walter Knoepfel, Repr., 3333 Wilkinson Blvd., Charlotte, N. C.

**AMERICAN MOISTENING CO.**, Providence, R. I. Sou. Plants, Charlotte, N. C., and Atlanta, Ga.

**AMERICAN PAPER TUBE CO.**, Woonsocket, R. I. Sou. Office: 513 South Tryon St., Charlotte, N. C.; Jesse Hodges, Sou. Repr.

**AMERICAN VISCOSCO CO.**, 350 Fifth Ave., New York City. Sou. Office, Johnston Bldg., Charlotte, N. C.; Harry L. Dalton, Mgr.

**ARKANSAS CO., INC.**, P. O. Box 210, Newark, N. J. Sou. Repr.: Jasper M. Brown, 1204 Greenwood Cliff, Charlotte, N. C.

**ARMOUR & CO.**, Armour Soap Works, 1355 West 31st St., Chicago 9, Ill. Dist. Divisional Offices: Armour & Co., P. O. Box 2664, Birmingham, Ala.; Armour & Co., 1816 Liberty Life Bldg., Charlotte, N. C.; Armour & Co., Jacksonville, Fla.; Armour & Co., Room 601, Chesapeake & Ohio Bldg., Huntington, W. Va.

**ARMSTRONG CORK CO.**, Industrial Div., Textile Products Section, Lancaster, Pa. Sou. Office, 33 Norwood Place, Greenville, S. C.; J. V. Ashley, Sou. Dist. Mgr.

**ARNOLD, HOFFMAN & CO., INC.**, Providence, R. I. Sou. Headquarters, 2139 N. Tryon St., Charlotte, N. C.; W. Chester Cobb, Sou. Sales Mgr.; Walter T. Bunce, Plant Mgr., Phone 2-4073; Technical Service Men: Reid Tull, 116 W. Thomas St., Salisbury, N. C.; Phone 1497-J; W. L. Mills and Philip L. Lavoie, 2130 N. Tryon St., Charlotte, N. C.; John H. Graham, P. O. Box 904, Greenville, S. C.; Phone 2922; John R. Brown, P. O. Box 749, Trussville, Ala.; Phone 127; Warehouse and Sou. Mfg. Plant, 1230 N. Tryon St., Charlotte, N. C.

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**BARBER-COLMAN CO.**, Rockford, Ill. Sou. Office, 31 W. McBee Ave., Green-ville, S. C.; J. H. Spencer, Mgr.

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**BEST & CO., INC., EDWARD H.**, Boston, Mass. Sou. Rep.: W. C. Hames, 185 Pinecrest Ave., Decatur, Ga.; Phone Dearborn 5974; Ralph Gossett, William J. Moore, 15 Augusta St., Greenville, S. C.; Phone 150.

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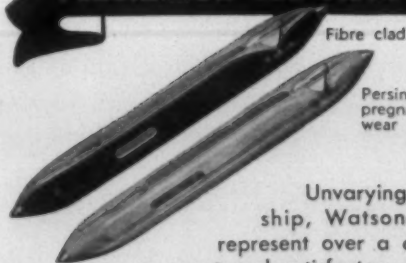
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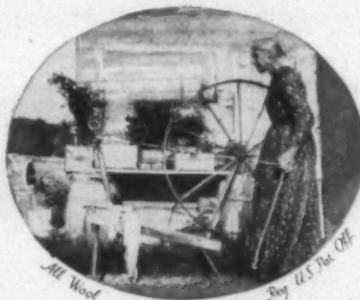
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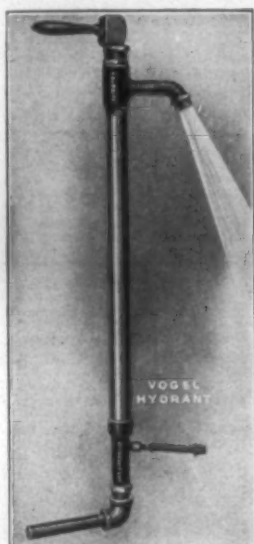
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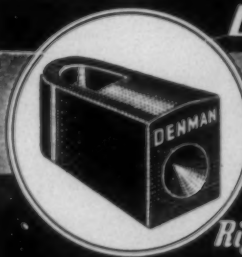
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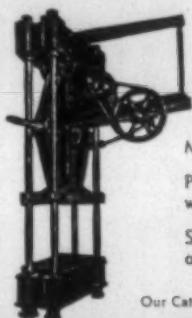
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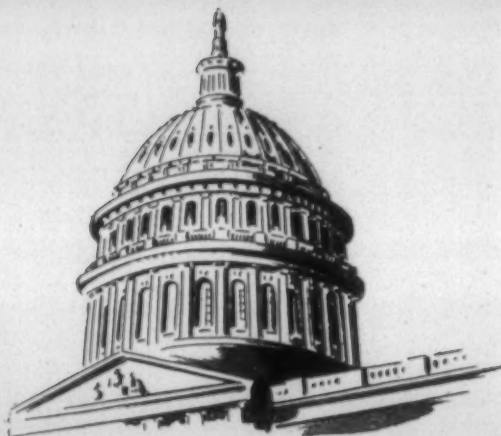


EVERY YEAR MORE PEOPLE DECIDE LEATHER IS BEST

# WATCHING

# WASHINGTON

[Exclusive and Timely News from the Nation's Capital]



PRESIDENT TRUMAN FACES A DETERMINED FRONT in Congress as its members return. Resentment runs deep and sharp conflicts are ahead. Labor legislation seems certain; probably in a form to meet a Presidential veto. President and Congress are at parting of ways in dealing with recalcitrant unions unless a new co-operative spirit, not now evident, comes to surface. The situation demands the highest statesmanship on both sides.

President's radio speech assailing Congress for reconversion delay was provocative and dangerously jeopardizes harmonious relations. Result: All Presidential labor proposals, including 65-75 cent minimum wage, full employment and fact-finding, will probably be rejected.

Congress will probably legislate: (1) To revise Wagner Labor Relations Act to put employers on even footing and assure impartial board; (2) Streamline collective bargaining machinery with protection of wage contract sanctity and standardized and unified adjudication of disputes.

Southern legislators are aroused over effort to groove reconversion legislation to CIO pattern. Complaints most heard from their constituents arise in strikes and price controls. President's failure to "freeze wages, and everything else, for reconversion period appears to have been a major Administration mistake.

Crack and upping in price ceilings, with major shift in President's economic policy, is imminent, due to (1) prospect of more paralyzing strikes, and (2) Congressional resentment of CIO-inspired self-serving legislation. In the absence of an over-all freeze, the only way out is in general raising of price ceilings to cover wage grants.

Calling up long-delayed FEPC bill in the Senate will lead to a filibuster by Senators Bilbo (Miss.) and Russell (Ga.). Six other Southern senators are pledged to help them. To invoke cloture to stop the "filibuster" requires a two-thirds vote. So far only 17 Eastern and 19 Western senators are committed to a cloture vote. All Southerners except possibly Pepper (Fla.) are expected to vote against cloture. A long, bitter, acrimonious debate looms.

Congress is reconvening, but no major legislation is ready for action. Result is several delayed bills will be called up. In House, the Rankin bill to protect veterans in their right to join or refrain from joining a union, and the Smith-Connally Act repealer; in the Senate, the McCarran bill prescribing fair administrative procedure.

There's general agreement that fact-finding is essential in settling labor disputes, but there's plenty of disagreement as to what is a pertinent fact. One thing not a fact, it's contended, is what profits may be in some future period; only such guesses can be had in delving into company records, and may amount to compulsory arbitration under an alias. Real purpose of fact-finding, it's claim-



ed, is to unscramble conflicting statements of contending parties, rather than a witch hunt through corporate records.

Revision of the computing formula for farm price parities, including cotton, is looming in Congress. Aim will be to increase prices right down the line. Unless prices are increased to consumers, processors will be caught in a squeeze. The chief aim will be to revise the price yardstick to allow farm labor costs to be weighted in the new standard.

Cotton exports are showing a steady gain as European markets re-open. Exports for August through October reached 650,000 bales, compared with 1.9 million bales for 1944-5 crop. Exports are still only 36 per cent of the pre-war average.

Social Security revision will be taken up by the House Ways and Means Committee Feb. 1, and consume six or more months. Pivotal questions is whether to eliminate all payroll taxes and finance a unified and combined program, including Federal employees and rail workers, through general taxation. The system will be in the red in about 20 years on the present scale of taxes and promised benefits. General taxation would mean wide coverage, including all workers and self-employed, and possibly take in national health plan, too.

Anti-trust policies will not retard reconversion, says Attorney General Clark, and there will be no persecution campaigns. He wants industry's co-operation, and says business will continue to have benefit of the department's informal opinions as to legality of projected plans, although in so doing the Department does not foreclose on future action. More than 100 projected plans have been submitted.

Plan to put 1946 raw cotton under a price ceiling is drawing hot criticism from Southern legislators, and preventative action looms if OPA's Bowles persists. Department of Agriculture is keeping a discreet silence.

Outstanding consumer credit increased \$296 million in November, to reach the highest level since December, 1942. Major part of the gain is \$162 million in charge accounts outstanding. Repair and modernization loans rose by \$57 million and installment sales credit by \$48 million. Rapid expansion in 1946 is expected when automobiles and other durable goods become available.

U. S. public and private debt at the end of 1945, excluding all duplication, says the Treasury Department, reached the all-time high of \$393 billion. Demand deposits in banks at the same time were \$116.1 billion. The total debt volume is not expected to decline in 1946, and may increase as durable goods become available. The aggregate debt is now twice what it was in 1941; three times over 1919, and five times over 1916. Danger exists in the fact that so large a part of it is not related to plant expansions or wealth producing factors.

State unemployment compensation funds are in excellent condition for any foreseeable eventually, says the Social Security Board, and 61 per cent of workers in covered employment in March could be paid benefits for the maximum duration under state laws. Total funds of all states amount to \$6,684,715,000. Factory workers separated from jobs in November were 71 in 1,000 employed, compared with 86 in 1,000 in October.

Loan to the British faces almost certain defeat for approval in the House, and Senate approval is in doubt. British have overplayed their hands in criticising the loan terms and advertising prospective stepped-up competition with American industry, plus moves to restrict American trade opportunities in world markets. Administration is withholding loan proposal from Congress as it exerts pressure to iron out opposition to approval.



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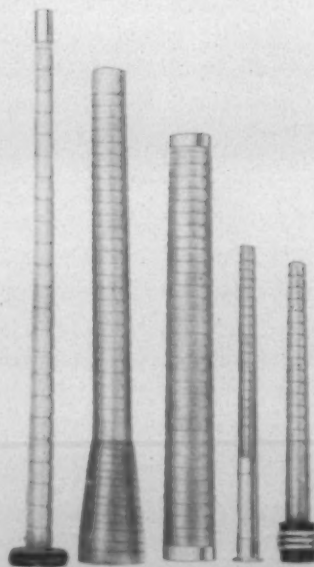
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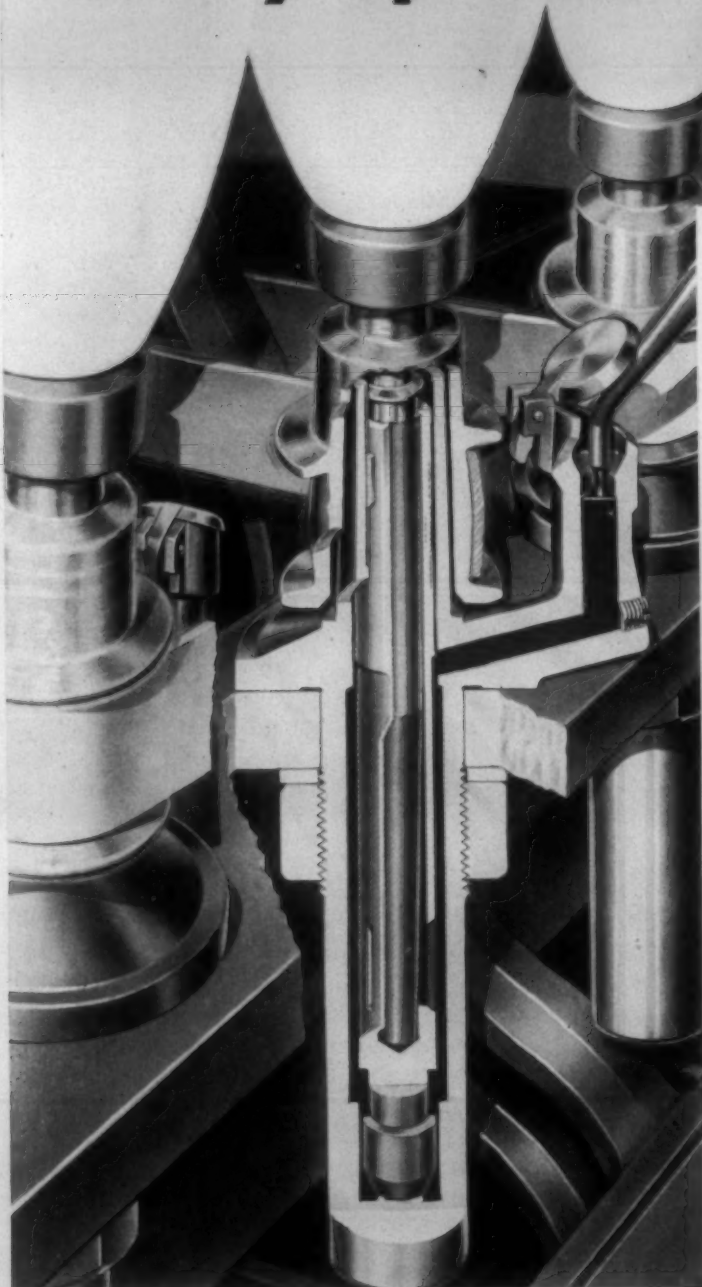


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